

GenCore version 5.1.4-p5_4578
Copyright (c) 1993 - 2003 Compugen Ltd.

OM protein - protein search, using sw model

Run on: March 24, 2003, 17:16:57 ; Search time 25.6875 Seconds
(without alignments)
46.686 Million cell updates/sec

Title: US-09-508-828B-1
Perfect score: 44
Sequence: 1 GXDXEDRY 9

Scoring table: BLOSUM62
Gapop 10.0, Gapext 0.5

Searched: 908470 seqs, 133250620 residues

Total number of hits satisfying chosen parameters: 908470

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 08
Maximum Match 100%
Listing first 45 summaries

Database : A_Geneseq_101002:*

1: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1980.DAT:*
2: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1981.DAT:*
3: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1982.DAT:*
4: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1983.DAT:*
5: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1984.DAT:*
6: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1985.DAT:*
7: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1986.DAT:*
8: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1987.DAT:*
9: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1988.DAT:*
10: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1989.DAT:*
11: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1990.DAT:*
12: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1991.DAT:*
13: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1992.DAT:*
14: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1993.DAT:*
15: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1994.DAT:*
16: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1995.DAT:*
17: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1996.DAT:*
18: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1997.DAT:*
19: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1998.DAT:*
20: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1999.DAT:*
21: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA2000.DAT:*
22: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA2001.DAT:*
23: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA2002.DAT:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	41	93.2	21	14	AA198001
2	41	93.2	25	14	AA198003
3	41	93.2	25	14	AA198005
4	41	93.2	31	14	AA198097
5	41	93.2	31	14	AA198699
6	41	93.2	33	18	AA198545
7	41	93.2	33	21	AA198504
8	41	93.2	33	21	AA198508
9	41	93.2	142	18	AA198786
10	41	93.2	208	21	AA1987318

11	41	93.2	208	21	AA1987329	Human prion protei
12	41	93.2	217	21	AA1987317	Cattle prion prote
13	41	93.2	217	21	AA1987328	Cattle prion prote
14	41	93.2	219	19	AA19870261	Bovine prion prote
15	41	93.2	219	20	AA19893571	Bovine prion prote
16	41	93.2	253	17	AA1986715	Human prion protei
17	41	93.2	253	19	AA1986960	Human prion protei
18	41	93.2	253	20	AA1987994	Human prion protei
19	41	93.2	253	20	AA1985901	Human prion protei
20	41	93.2	253	21	AA1985035	Human prion protei
21	41	93.2	253	21	AA1986272	Human prion protei
22	41	93.2	253	21	AA1981485	Human prion protei
23	41	93.2	253	22	AA1985853	Human prion protei
24	41	93.2	253	22	AA1982112	Human prion protei
25	41	93.2	253	22	AA1987238	Human prion protei
26	41	93.2	253	22	AA1987239	Human prion protei
27	41	93.2	253	22	AA19872341	Human prion protei
28	41	93.2	253	22	AA19872345	Human prion protei
29	41	93.2	253	22	AA19872356	Human prion protei
30	41	93.2	253	22	AA19861770	Human prion protei
31	41	93.2	253	23	AA19851787	Human prion protei
32	41	93.2	253	23	AA19879575	Human prion protei
33	41	93.2	253	23	AA1985603	Human prion protei
34	41	93.2	253	23	AA19804426	Human prion protei
35	41	93.2	257	23	AA19804425	Human prion protei
36	41	93.2	257	23	AA1986716	Human prion protei
37	41	93.2	263	17	AA1986961	Bovine prion prote
38	41	93.2	263	19	AA1985902	Bovine prion prote
39	41	93.2	263	22	AA1985854	Bovine prion prote
40	41	93.2	263	23	AA19851788	Bovine prion prote
41	41	93.2	264	20	AA1987995	Bovine prion prote
42	41	93.2	264	22	AA1982113	Bovine prion prote
43	41	93.2	264	22	AA1982361	Cow prion protei
44	41	93.2	264	22	AA1987364	Kudu prion protei
45	41	93.2	264	22	AA1987364	Kudu prion protei

ALIGNMENTS

RESULT 1
ID AA198001 standard; protein: 21 AA.
XX
AC AA198001;
XX
14-OCT-1993 (first entry)
XX
DE Prion protein region B #5.
XX
DE
XX
KW Antigen: prion; protein; region; frame shift; repeat; mutation; PrP;
KW F50; F5b; subfragment; antibody; treatment; spongiform encephalopathy;
KW human; sheep; cattle; cellular binding; aggregation; mammal; scrapie;
KW immune system; PrPsc; ratio-inverso peptide; enzymatic degradation;
KW resistance.
XX
OS Synthetic.
XX
PN WO9311155-A.
XX
PD 10-JUN-1993.
XX
PF 03-DEC-1992; 92MO-GB02246.
XX
PR 03-DEC-1992; 91GB-0025747.
XX
PR 10-JUL-1992; 92GB-0014663.
XX
PA (PROT-) PROTEUS MOLECULAR DESIGN LTD.
XX
PI Fishleigh RV, Mee RP, Robson B.
XX
DR WPI; 1993-196994/24.
XX

PT New polypeptide(s) contg. antigenic site of prion protein -
 PT useful for treatment and diagnosis of mammalian encephalopathies
 PT e.g. Creutzfeldt-Jacob disease and kuru

PS Claim 10; Page 65; 82pp; English.

CC The sequences given in AAR36797-99 and AAR38000-01 represent
 CC polypeptides derived from an antigenic site, region B, of a prion
 CC protein. Prion proteins comprise six regions of interest (A-F), and two
 CC related frame shift peptides sequences caused by a repeating section in
 CC of +1 (Fsa) or -1 (Fsb). These peptides and subfragments of these
 CC (see AAR38002-05), and antibodies raised against these, may be used to
 CC treat or prevent spongiform encephalopathy in humans, sheep or cattle.
 CC They can be used to block cellular binding and aggregation of prion
 CC proteins and to stimulate the mammalian immune system. These peptides
 CC may be used to distinguish between the normal form of prion protein
 CC (PrPc) and the scrapie-associated form (PrPsc). These peptides may
 CC include rare or synthetic amino acids or a ratio-inverso peptide
 CC modification to improve resistance to enzymatic degradation.

SO Sequence 21 AA;

Query Match 93.2%; Score 41; DB 14; Length 21;
 Best Local Similarity 77.8%; Pred. No. 0.22;

Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 GXDXEDRY 9
 | | | | |
 Db 11 GSDYEDRY 19

RESULT 2
 AAR38003 AAR38003 standard; protein; 25 AA.

AC AAR38003;

DT 14-OCT-1993 (first entry)

DE Prion protein region B subfragment #1.

KW Antigen; prion; protein; region; frame shift; repeat; mutation; PrPc;
 KW Fsa; Fsb; subfragment; antibody; treatment; spongiform encephalopathy;
 KW human; sheep; cattle; cellular binding; aggregation; mammal; scrapie;
 KW immune system; PrPsc; ratio-inverso peptide; enzymatic degradation;
 KW resistance.

XX Synthetic.

OS Key Location/Qualifiers

FT Misc-difference 1 /note- "One or more residues or may be absent"

FT Misc-difference 2 /note- "May be absent"

FT Misc-difference 3 /note- "May be absent"

FT Misc-difference 4 /note- "May be absent"

FT Misc-difference 5 /note- "May be absent"

FT Misc-difference 21 /note- "May be absent"

FT Misc-difference 22 /note- "May be absent"

FT Misc-difference 23 /note- "May be absent"

FT Misc-difference 24 /note- "May be absent"

FT Misc-difference 25 /note- "May be absent"

PN M09311155-A.

XX 10-JUN-1993.

PD 03-DEC-1992; 92WO-GB02246.

PR 03-DEC-1991; 91GB-0025747.

PR 10-JUL-1992; 92GB-0014663.

PA (PROT-) PROTEUS MOLECULAR DESIGN LTD.

PI Fishleigh RV, Mee RP, Robson B;

DR WPI; 1993-196994/24.

PT New polypeptide(s) contg. antigenic site of prion protein -
 PT useful for treatment and diagnosis of mammalian encephalopathies
 PT e.g. Creutzfeldt-Jacob disease and kuru

PS Claim 12; Page 65; 82pp; English.

CC The sequences given in AAR38002-05 represent polypeptide subfragments
 CC derived from an antigenic site, region B, of a prion protein. Prion
 CC proteins comprise six regions of interest (A-F), and two related
 CC frame shift peptides sequences caused by a repeating section in
 CC of +1 (Fsa) or -1 (Fsb). These subfragments or the full length peptide
 CC (see AAR36796-99 and AAR38000-01), and antibodies raised against these,
 CC may be used to treat or prevent spongiform encephalopathy in humans,
 CC sheep or cattle. They can be used to block cellular binding and
 CC aggregation of prion proteins and to stimulate the mammalian immune
 CC system. These peptides may be used to distinguish between the normal
 CC form of prion protein (PrPc) and the scrapie-associated form (PrPsc).
 CC These peptides may include rare or synthetic amino acids or a
 CC ratio-inverso peptide modification to improve resistance to enzymatic
 CC degradation.

SO Sequence 25 AA;

Query Match 93.2%; Score 41; DB 14; Length 25;
 Best Local Similarity 77.8%; Pred. No. 0.27;

Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 1 GXDXEDRY 9
 | | | | |
 Db 12 GSDYEDRY 20

RESULT 3
 AAR38005

AC AAR38005 standard; protein; 25 AA.

DT 14-OCT-1993 (first entry)

DE Prion protein region B subfragment #3.

KW Antigen; prion; protein; region; frame shift; repeat; mutation; PrPc;
 KW Fsa; Fsb; subfragment; antibody; treatment; spongiform encephalopathy;
 KW human; sheep; cattle; cellular binding; aggregation; mammal; scrapie;
 KW immune system; PrPsc; ratio-inverso peptide; enzymatic degradation;
 KW resistance.

XX Synthetic.

OS Key Location/Qualifiers

FT Misc-difference 1 /note- "One or more residues or may be absent"

FT Misc-difference 2 /note- "May be absent"

FT Misc-difference 3 /note- "May be absent"

FT Misc-difference 4 /note- "May be absent"

FT Misc-difference 5 /note- "May be absent"
 FT Misc-difference 21 /note- "May be absent"
 FT Misc-difference 22 /note- "May be absent"
 FT Misc-difference 23 /note- "May be absent"
 FT Misc-difference 24 /note- "May be absent"
 FT Misc-difference 25 /note- "May be absent"
 FT Misc-difference 25 /note- "One or more residue or may be absent"
 PN MO9311155-A.
 XX 10-JUN-1993.
 PD 03-DEC-1992; 92MO-GB02246.
 PE 03-DEC-1991; 91GB-0025747.
 PR 10-JUL-1992; 92GB-0014663.
 XX (PROT-) PROTEUS MOLECULAR DESIGN LTD.
 PA Fishleigh RV, Mee RP, Robson B;
 PI WPI; 1993-196994/24.
 XX New polypeptide(s) contg. antigenic site of prion protein -
 PT useful for treatment and diagnosis of mammalian encephalopathies
 PT e.g. Creutzfeldt-Jacob disease and kuru
 PS Claim 12; Page 66; 82pp; English.
 XX The sequences given in AAR38002-05 represent polypeptide subfragments
 CC derived from an antigenic site, region B, of a prion protein. Prion
 CC proteins comprise six regions of interest (A-F), and two related
 CC protein shift peptides sequences caused by a repeating section in
 CC frame shift peptides having a nucleic acid coding sequence frame shift mutation
 CC of +1 (Fsa) or -1 (Fsb). These subfragments or the full length peptide
 CC (see AAR36796-99 and AAR38000-01), and antibodies raised against these,
 CC may be used to treat or prevent spongiform encephalopathy in humans,
 CC sheep or cattle. They can be used to block cellular binding and
 CC aggregation of prion proteins and to stimulate the mammalian immune
 CC system. These peptides may be used to distinguish between the normal
 CC form of prion protein (PrPc) and the scrapie-associated form (PrPsc).
 CC These peptides may include rare or synthetic amino acids or a
 CC ratio-inverso peptide modification to improve resistance to enzymatic
 CC degradation.
 SO Sequence 25 AA;
 QY Query Match 93.2%; Score 41; DB 14; Length 25;
 Best Local Similarity 77.8%; Pred. No. 0.27; Indels 0; Gaps 0;
 Matches 7; Conservative 0; Mismatches 2;
 DB 12 GSDYEDRY 20
 QY 1 GSDYEDRY 9
 ID AAR36797 standard; protein: 31 AA.
 AC AAR36797;
 DT 14-OCT-1993 (first entry)
 DE Prion protein region B #1.
 KW Antigen: prion; protein: region; frame shift; repeat; mutation; PrPc;

KW Fsa; subfragment; antibody; treatment; spongiform encephalopathy;
 KW human; sheep; cattle; cellular binding; aggregation; mammal; scrapie;
 KW immune system; PrPc; ratio-inverso peptide; enzymatic degradation;
 XX resistance.
 OS Synthetic.
 XX Key location/Qualifiers
 FT Misc-difference 1 /note- "One or more residues or may be absent"
 FT Misc-difference 2 /note- "May be absent"
 FT Misc-difference 3 /note- "May be absent"
 FT Misc-difference 4 /note- "May be absent"
 FT Misc-difference 5 /note- "May be absent"
 FT Misc-difference 27 /note- "May be absent"
 FT Misc-difference 28 /note- "May be absent"
 FT Misc-difference 29 /note- "May be absent"
 FT Misc-difference 30 /note- "May be absent"
 FT Misc-difference 31 /note- "May be absent"
 FT Misc-difference 31 /note- "One or more residue or may be absent"
 PN MO9311155-A.
 XX 10-JUN-1993.
 PD 03-DEC-1992; 92MO-GB02246.
 PE 03-DEC-1991; 91GB-0025747.
 PR 10-JUL-1992; 92GB-0014663.
 XX (PROT-) PROTEUS MOLECULAR DESIGN LTD.
 PA Fishleigh RV, Mee RP, Robson B;
 PI WPI; 1993-196994/24.
 XX New polypeptide(s) contg. antigenic site of prion protein -
 PT useful for treatment and diagnosis of mammalian encephalopathies
 PT e.g. Creutzfeldt-Jacob disease and kuru
 PS Claim 9; Page 64; 82pp; English.
 XX The sequences given in AAR36797-99 and AAR38000-01 represent
 CC polypeptides derived from an antigenic site, region B, of a prion
 CC protein. Prion proteins comprise six regions of interest (A-F), and two
 CC related frame shift peptides sequences caused by a repeating section in
 CC region E having a nucleic acid coding sequence frame shift mutation
 CC of +1 (Fsa) or -1 (Fsb). These peptides and subfragments of these
 CC (see AAR38002-05), and antibodies raised against these, may be used to
 CC treat or prevent spongiform encephalopathy in humans, sheep or cattle.
 CC They can be used to block cellular binding and aggregation of prion
 CC proteins and to stimulate the mammalian immune system. These peptides
 CC may be used to distinguish between the normal form of prion protein
 CC (PrPc) and the scrapie-associated form (PrPsc). These peptides may
 CC include rare or synthetic amino acids or a ratio-inverso peptide
 CC modification to improve resistance to enzymatic degradation.
 SO Sequence 31 AA;
 QY Query Match 93.2%; Score 41; DB 14; Length 31;
 Best Local Similarity 77.8%; Pred. No. 0.33; Indels 0; Gaps 0;
 Matches 7; Conservative 0; Mismatches 2;
 QY 1 GSDYEDRY 9
 ID AAR36797 standard; protein: 31 AA.
 AC AAR36797;
 DT 14-OCT-1993 (first entry)
 DE Prion protein region B #1.
 KW Antigen: prion; protein: region; frame shift; repeat; mutation; PrPc;

Db 12 GSDYEDRY 20

RESULT 5
 AAR36799
 ID AAR36799 standard: protein: 31 AA.
 XX
 AC AAR36799:

XX 14-OCT-1993 (first entry)
 XX
 DE Prion protein region B #3.

XX Antigen: prion; protein: region: frame shift; repeat; mutation; PRPC;
 KM F89; F8D; subfragment; antibody; treatment; spongiform encephalopathy;
 KM human; sheep; cattle; cellular binding; aggregation; mammal; scrapie;
 KM immune system; PRPC; ratio-inverse peptide; enzymatic degradation;
 KM resistance.

XX Synthetic.

XX Key Location/Qualifiers

FT Misc-difference 1 /note- "One or more residues or may be absent"

FT Misc-difference 2 /note- "May be absent"

FT Misc-difference 3 /note- "May be absent"

FT Misc-difference 4 /note- "May be absent"

FT Misc-difference 5 /note- "May be absent"

FT Misc-difference 27 /note- "May be absent"

FT Misc-difference 28 /note- "May be absent"

FT Misc-difference 29 /note- "May be absent"

FT Misc-difference 30 /note- "May be absent"

FT Misc-difference 31 /note- "May be absent"

FT Misc-difference 31 /note- "One or more residue or may be absent"

PN W09311155-A.

PD 10-JUN-1993.

PF 03-DEC-1992: 92WO-GB02246.

PR 03-DEC-1991: 91GB-0025747.

PR 10-JUL-1992: 92GB-0014663.

PA (PROT-) PROTEUS MOLECULAR DESIGN LTD.

PI Fishleigh RV, Mee RP, Robson B;

DR WPI: 1993-196994/24.

XX New polypeptide(s) conty. antigenic site of prion protein -
 PT useful for treatment and diagnosis of mammalian encephalopathies
 PT e.g. Creutzfeldt-Jacob disease and kuru
 PS
 XX

XX Claim 9; Page 65; 82pp; English.

XX The sequences given in AAR36797-99 and AAR38000-01 represent
 CC polypeptides derived from an antigenic site, region B, of a prion
 CC protein. Prion proteins comprise six regions of interest (A-F), and two
 CC related frame shift peptides sequences caused by a repeating section in
 CC region E having a nucleic acid coding sequence frame shift mutation
 CC of +1 (FSA) or -1 (FSB). These peptides and subfragments of these
 CC (see AAR38002-05), and antibodies raised against these, may be used to
 CC treat or prevent spongiform encephalopathy in humans, sheep or cattle.
 CC They can be used to block cellular binding and aggregation of prion

CC proteins and to stimulate the mammalian immune system. These peptides
 CC may be used to distinguish the mammalian immune system. These peptides
 CC (PRPC) and the scrapie-associated form (PRSC). These peptides may
 CC include rare or synthetic amino acids or a ratio-inverse peptide
 CC modification to improve resistance to enzymatic degradation.

SO Sequence 31 AA;
 Query Match 93.2%; Score 41; DB 14; Length 31;
 Best Local Similarity 77.8%; Pred. No. 0.33;
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GSDYEDRY 9
 Db 12 GSDYEDRY 20

RESULT 6
 AAM35545

XX AAM35545 standard: peptide: 33 AA.

AC AAM35545;

DT 22-APR-1998 (first entry)

DE Immunization DMDPC SEQ ID NO:89 from W09738011.

XX T-cell stimulatory peptide; immunogen; non-dendritic; carrier; tumour;
 KM scaffold; inhibition; metastasis; wound healing; solid phase.

XX Synthetic.

PN W09738011-A1.

PD 16-OCT-1997.

PF 03-APR-1997: 97WO-DE00146.

PR 03-APR-1996: 96DK-0000398.

PA (PEPR-) PEPRSEARCH AS.

PI Heegaard PMH, Jakobsen PH;

DR WPI: 1997-512645/47.

XX Non-dendritic peptide carrier linked to a solid phase - useful as a
 PT diagnostic agent and as a scaffold for production of chemical
 PT derivatives
 PS

XX Example 31; Page 156; 262pp; English.

XX A non-dendritic peptide carrier (A) has been developed which is coupled
 CC through a linker to a solid phase, forming a complex of (A)-solid phase.
 CC Where (A) comprises 10-50 amino acids capable of forming a secondary
 CC structure in a benign buffer after liberation from the solid phase, and
 CC further the (A)-solid phase complex comprises an immunogenic substance
 CC and/or an immune mediator coupled on (A). The present sequence
 CC represents a peptide used in an example from the present invention.
 CC (A)-solid phase complex can be used as a scaffold for the production of
 CC chemical derivatives, characterised by covalently attaching molecules at
 CC attachment points. Alternatively (A) is used as a scaffold-peptide for
 CC the incorporation into an immunostimulating complex (ISCOM) resulting in
 CC substances in an aqueous solution by conjugation. (A) derivatised with
 CC one or more peptides having fibronectin-, laminin- or vitronectin-like
 CC binding activities can be used for the promotion of cell-attachment to
 CC plastic surfaces, in particular to inhibit tumour growth and metastasis,
 CC and for promotion of wound healing. Also a derivatised (A) can be used
 CC for the selection of specifically-binding aptamers or as a diagnostic
 CC agent. Such diagnostic-(A) molecules could be used to detect molecules
 CC derived from or indicative of pregnancy or of a disease, such as an
 CC infectious, autoimmune or cancerous disease.

XX Sequence 33 AA:

Query Match 93.2%; Score 41; DB 18; Length 33;
Best Local Similarity 77.8%; Pred. No. 0.36;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GDXEDRY 9
| | | | |
Db 1 GSDYEDRY 9

RESULT 7
AAB15054
ID AAB15054 standard; Peptide: 33 AA.

XX AAB15054;
XX 18-DEC-2000 (first entry)

DE Human prion protein peptide homologous to ovine sequence 145-177.

XX Prion; PrP; guanidine thiocyanate; gdnSCN; TSE; BSE;

KW transmissible spongiform encephalopathy; antibody;

KW bovine spongiform encephalopathy; sheep; cattle; human; mouse;

XX hamster; rabbit.

XX Homo sapiens.

XX WO200048003-A1.

XX 17-AUG-2000.

XX 09-FEB-2000; 2000MO-NL00079.

XX 11-FEB-1999; 99EP-0200391.

XX (DIEN-) STICHTING DIENST LANDBOUWKUNDIG ONDERZOE.

XX Garssen GJ, Jacobs JG, Langerfeld JPM, Smits MA, Van Keulen LJM;

XX Schreuder BEC, Bossers A;

XX WPI; 2000-506099/45.

XX Use of guanidine thiocyanate for reducing risk of false-positive

XX results in testing mammalian sample for aberrant prion protein, useful

XX for detection of transmissible spongiform encephalopathies -

XX Disclosure; Fig 2; 49pp; English.

XX The present invention relates to a method for reducing the risk of

XX scoring a false positive test result in testing a sample for aberrant

XX prion protein. The method involves the use of guanidine thiocyanate

XX (gdnSCN) or its functional equivalent. This test is highly useful for

XX testing for transmissible spongiform encephalopathies (TSEs) such as

XX BSE (bovine spongiform encephalopathy). The method allows a faster,

XX simpler and more reliable method for monitoring cattle and sheep for

XX the presence of aberrant prion protein before it reaches the human

XX and animal food chain. In the invention antipeptide antibodies were

XX raised against sheep prion protein peptides. The present sequence is

XX the human prion protein sequence homologous to the sheep peptide

XX indicated.

XX Sequence 33 AA;

XX Query Match 93.2%; Score 41; DB 21; Length 33;

XX Best Local Similarity 77.8%; Pred. No. 0.36;

XX Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GDXEDRY 9
| | | | |
Db 1 GSDYEDRY 9

RESULT 8
AAB15058
ID AAB15058 standard; Peptide: 33 AA.

XX AAB15058;

XX 18-DEC-2000 (first entry)

DE Cattle prion protein peptide homologous to ovine sequence 145-177.

XX Prion; PrP; guanidine thiocyanate; gdnSCN; TSE; BSE;

KW transmissible spongiform encephalopathy; antibody;

KW bovine spongiform encephalopathy; sheep; cattle; human.

XX Bos taurus.

XX WO200048003-A1.

XX 17-AUG-2000.

XX 09-FEB-2000; 2000MO-NL00079.

XX 11-FEB-1999; 99EP-0200391.

XX (DIEN-) STICHTING DIENST LANDBOUWKUNDIG ONDERZOE.

XX Garssen GJ, Jacobs JG, Langerfeld JPM, Smits MA, Van Keulen LJM;

XX Schreuder BEC, Bossers A;

XX WPI; 2000-506099/45.

XX Use of guanidine thiocyanate for reducing risk of false-positive

XX results in testing mammalian sample for aberrant prion protein, useful

XX for detection of transmissible spongiform encephalopathies -

XX Disclosure; Fig 2; 49pp; English.

XX The present invention relates to a method for reducing the risk of

XX scoring a false positive test result in testing a sample for aberrant

XX prion protein. The method involves the use of guanidine thiocyanate

XX (gdnSCN) or its functional equivalent. This test is highly useful for

XX testing for transmissible spongiform encephalopathies (TSEs) such as

XX BSE (bovine spongiform encephalopathy). The method allows a faster,

XX simpler and more reliable method for monitoring cattle and sheep for

XX the presence of aberrant prion protein before it reaches the human

XX and animal food chain. In the invention antipeptide antibodies were

XX raised against sheep prion protein peptides. The present sequence is

XX the cattle prion protein sequence homologous to the sheep peptide

XX indicated.

XX Sequence 33 AA;

XX Query Match 93.2%; Score 41; DB 21; Length 33;

XX Best Local Similarity 77.8%; Pred. No. 0.36;

XX Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GDXEDRY 9
| | | | |
Db 1 GSDYEDRY 9

RESULT 9
AAM17686
ID AAM17686 standard; peptide: 142 AA.

XX AAM17686;

XX 14-JAN-1998 (first entry)

DE Prion protein peptide Hu 90-231.

XX Prion protein; PrP; alpha helical domain; screening; inhibition;

KW

binding; scrapie; bovine spongiform encephalopathy; BSE; CJD;
 Creutzfeldt-Jakob disease; Kuru; GSS; FFI; fatal familial insomnia;
 Gerstmann-Strausler-Scheinker disease; hamster; human.
 OS Homo sapiens.
 XX
 XX MO9716728-A1.
 XX
 XX PD 09-MAY-1997.
 XX
 XX PF 28-OCT-1996; 96MO-US17462.
 XX
 XX PR 02-NOV-1995; 95US-0556823.
 XX
 XX PA (REGC) UNITV CALIFORNIA.
 XX
 XX PI Cohen FE, Kaneko K, Prusiner SB;
 XX
 XX DR WPI; 1997-272248/24.
 XX
 XX PT Prion proteins (PrPs) having at least one alpha-helical domain -
 XX used in assays for screening compounds able to inhibit or decrease
 XX the binding of PrP peptide(s) to cellular prion proteins or
 XX peptide(s)
 XX
 XX PS Claim 11; Page 7-38; 50pp; English.
 XX
 XX CC The present sequence represents a prion protein (PrP) peptide.
 XX CC PrP has an ability to induce a conformational change in cellular
 XX CC prion protein (PrP-C). Methods, for screening compounds which
 XX CC inhibit the binding of PrP-C to a PrP peptide, are used for screening
 XX CC for drugs that may be useful in the treatment prion-related disease
 XX CC (e.g. scrapie, BSE (bovine spongiform encephalopathy), CJD
 XX CC (Creutzfeldt-Jakob disease), Kuru, GSS (Gerstmann-Strausler-Scheinker
 XX CC disease) and FFI (fatal familial insomnia).
 XX
 XX SQ Sequence 142 AA;
 XX
 XX Query Match 93.2%; Score 41; DB 18; Length 142;
 XX Best Local Similarity 77.8%; Pred. No. 1.6;
 XX Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 XX
 XX QY 1 GDXEDRY 9
 XX | | | | |
 XX Db 53 GSDYEDRY 61
 XX
 XX RESULT 10
 XX AAB07318
 XX ID AAB07318 standard; protein; 208 AA.
 XX
 XX AC AAB07318;
 XX
 XX DT 17-OCT-2000 (first entry)
 XX
 XX DE Human prion protein sequence.
 XX
 XX KW Human; prion protein; transmissible spongiform encephalopathy;
 XX KW bovine spongiform encephalopathy; BSE diagnosis; TSE; PrP.
 XX
 XX OS Homo sapiens.
 XX
 XX FT Key Location/Qualifiers
 XX FT Region 29..69
 XX FT /note- "Repeat region consisting of tandem repeats
 XX FT of repeat unit: PHGGGWGQ (AAB07319)"
 XX FT Disulfide-bond 157..192
 XX FT Modified-site 208
 XX FT /note- "C-terminal phospho-inositol glycolipid
 XX FT membrane anchor (-GPI)"
 XX
 XX PN WO200029850-A1.
 XX

PD 25-MAY-2000.
 XX
 XX PF 27-OCT-1999; 99MO-FI00897.
 XX
 XX PR 17-NOV-1998; 98FI-0002481.
 XX
 XX PA (WALL-) WALLAC OY.
 XX PA (BBSR-) BBSRC OFFICE.
 XX
 XX PI Hope J, Barnard GJR, Birckett CR;
 XX
 XX DR WPI; 2000-387880/33.
 XX
 XX PT Novel immunoassay for prion protein, used for the determination of
 XX transmissible spongiform encephalopathies in bovines -
 XX Disclosure: Page 43-44; 50pp; English.
 XX
 XX CC The present sequence is the human prion protein (PrP) sequence.
 XX CC Conversion of the normal cellular form of PrP into an aggregated,
 XX CC insoluble isoform is implicated in the pathogenesis of transmissible
 XX CC spongiform encephalopathies (TSEs). Examples of TSEs include Bovine
 XX CC spongiform encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease
 XX CC (CJD) and Gerstmann-Strausler-Scheinker syndrome (GSS). The concentration
 XX CC of this protein in body fluid or tissue samples may be measured by an
 XX CC assay of the present invention, in which a PrP epitope is captured by an
 XX CC antibody, which is then detected. The presence of PrP indicates TSE. PrP
 XX CC epitopes (AAB07320-807326) are derived from the protease resistant core
 XX CC of PrP that is occluded when the PrP is in an aggregated state.
 XX
 XX SQ Sequence 208 AA;
 XX
 XX Query Match 93.2%; Score 41; DB 21; Length 208;
 XX Best Local Similarity 77.8%; Pred. No. 2.5;
 XX Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 XX
 XX QY 1 GDXEDRY 9
 XX | | | | |
 XX Db 120 GSDYEDRY 128
 XX
 XX RESULT 11
 XX AAB07329
 XX ID AAB07329 standard; protein; 208 AA.
 XX
 XX AC AAB07329;
 XX
 XX DT 17-OCT-2000 (first entry)
 XX
 XX DE Human prion protein sequence.
 XX
 XX KW Human; prion protein; transmissible spongiform encephalopathy;
 XX KW bovine spongiform encephalopathy; TSE diagnosis; PrP.
 XX
 XX OS Homo sapiens.
 XX
 XX FT Key Location/Qualifiers
 XX FT Region 29..69
 XX FT /note- "Repeat region consisting of tandem repeats
 XX FT of repeat unit: PHGGGWGQ (AAB07319)"
 XX FT Disulfide-bond 157..192
 XX FT Modified-site 208
 XX FT /note- "C-terminal phospho-inositol glycolipid
 XX FT membrane anchor (-GPI)"
 XX
 XX PN WO200029849-A1.
 XX
 XX PD 25-MAY-2000.
 XX
 XX PF 27-OCT-1999; 99MO-FI00896.
 XX
 XX PR 17-NOV-1998; 98FI-0002480.
 XX

XX	PA	(WALL-) WALLAC OY.
XX	PA	(BBSR-) BBSRC OFFICE.
XX	PI	Hope J, Barnard GJR, Birkett CR;
XX	DR	WPI; 2000-399778/34.
XX	PT	New immunoassay for prion protein, used for determination of
XX	PT	transmissible spongiform encephalopathies in mammals, comprises
XX	PT	specific capture antibody -
XX	PS	Disclosure; Page 43-44; 50pp; English.
XX	CC	The present sequence is the human prion protein (PrP) sequence.
XX	CC	Conversion of the normal cellular form of PrP into an aggregated,
XX	CC	insoluble isoform is implicated in the pathogenesis of Transmissible
XX	CC	Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine
XX	CC	Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease
XX	CC	(CJD) and Gerstmann-Strausler-Sheinker syndrome (GSS). The concentration
XX	CC	of this protein in body fluid or tissue samples may be measured by an
XX	CC	assay of the present invention, in which a PrP epitope is captured by an
XX	CC	antibody, which is then detected. The presence of PrP indicates TSE. PrP
XX	CC	epitopes (AA07320-B07326) are derived from the protease resistant core
XX	CC	of PrP that is occluded when the PrP is in an aggregated state.
XX	SO	Sequence 208 AA;
OY	Query Match	93.2%; Score 41; DB 21; Length 208;
DB	Best Local Similarity	77.8%; Pred. No. 2.5;
	Matches 7; Conservative	0; Mismatches 2; Indels 0; Gaps 0;
	1 GNDXEDRY 9	
	120 GSDYEDRY 128	
RESULT 12		
AA07317		
ID	AA07317 standard; protein; 217 AA.	
AC	AA07317;	
XX		
XX	17-OCT-2000 (first entry)	
DE		
XX	Cattle prion protein sequence.	
XX		
XX	Cattle; prion protein; transmissible spongiform encephalopathy;	
KW	bovine spongiform encephalopathy; BSE diagnosis; TSE; PrP.	
XX		
XX	Bos bovis.	
OS		
XX		
PH	Key	Location/Qualifiers
FT	Region	37..79
FT	/note= "Repeat region consisting of tandem repeats	
FT	of repeat unit: PHGGGWGQ (AA07319)"	
FT	Disulfide-bond	166..201
FT	Modified-site	217
FT	/note= "C-terminal phospho-inositol glycolipid	
FT	membrane anchor (-GPI)"	
XX		
XX	WO200029850-A1.	
XX		
PD	25-MAY-2000.	
XX		
PE	27-OCT-1999; 99WO-FI00897.	
XX		
PR	17-NOV-1998; 98FI-0002481.	
XX		
XX		
PA	(WALL-) WALLAC OY.	
PA	(BBSR-) BBSRC OFFICE.	
XX		
PI	Hope J, Barnard GJR, Birkett CR;	
XX		

DR	WPI; 2000-387880/33.
XX	
PT	Novel immunoassay for prion protein, used for the determination of
PT	transmissible spongiform encephalopathies in bovines -
XX	
PS	Disclosure: Page 42-43; 50pp; English.
XX	
CC	The present sequence is the cattle prion protein (PrP) sequence.
CC	Conversion of the normal cellular form of PrP into an aggregated,
CC	insoluble isoform is implicated in the pathogenesis of transmissible
CC	spongiform encephalopathies (TSEs). Examples of TSEs include bovine
CC	Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease
CC	(CJD) and Gerstmann-Strausler-Scheinker syndrome (GSS). The concentration
CC	of this protein in body fluid or tissue samples may be measured by an
CC	assay of the present invention, in which a PrP epitope is captured by an
CC	antibody, which is then detected. The presence of PrP indicates BSE. PrP
CC	epitopes (AAB07320-H07326) are derived from the protease resistant core
CC	of PrP that is occluded when the PrP is in an aggregated state.
XX	
SQ	Sequence 217 AA:
Query Match	93.2%; Score 41; DB 21; Length 217;
Best Local Similarity	77.8%; Pred. No. 2.6;
Matches	7; Conservative 0; Mismatches 2; Indels 0; Gaps 0.
OY	1 GADXDEDRY 9
	I I I I I I I
ID	AAB07328 standard; protein; 217 AA.
AC	AAB07328;
DT	17-OCT-2000 (first entry)
DE	Cattle prion protein sequence.
XX	
KM	Cattle; prion protein; transmissible spongiform encephalopathy;
XX	bovine spongiform encephalopathy; TSE diagnosis; PrP.
OS	Bos bovls.
XX	
EH	Key Location/Qualifiers
FT	Region 37..79
FT	/note= "Repeat region consisting of tandem repeats
FT	of Repeat unit: PHGGGWGQ (AAB07319)"
FT	Disulfide-bond 166..201
FT	Modified-site 217
FT	/note= "C-terminal phospho-inositol glycolipid
FT	membrane anchor (- GPI)"
XX	
PN	WO200029849-A1.
PD	25-MAY-2000.
XX	
PF	27-OCT-1999; 99WO-FI00896.
PR	17-NOV-1998; 98FI-0002480.
XX	
PA	(WALL-) WALLAC OY.
XX	(BBSR-) BBSRC OFFICE.
XX	
PI	Hope J, Barnard GR, Barkett CR;
DR	WPI; 2000-399778/34.
XX	
PT	New immunoassay for prion protein, used for determination of
PT	transmissible spongiform encephalopathies in mammals, comprises
PT	specific capture antibody -
XX	

PS Disclosure: Page 42-43; 50pp; English.

CC The present sequence is the cattle prion protein (PrP) sequence.

CC Conversion of the normal cellular form of PrP into an aggregated,

CC insoluble isoform is implicated in the pathogenesis of Transmissible

CC Spongiform Encephalopathies (TSEs). Examples of TSEs include Bovine

CC Spongiform Encephalopathy (BSE), scrapie, Creutzfeldt-Jakob disease

CC (CJD) and Gerstmann-Strausler-Scheinker syndrome (GSS). The concentration

CC of this protein in body fluid or tissue samples may be measured by an

CC assay of the present invention. In which a PrP epitope is captured by an

CC antibody, which is then detected. The presence of PrP indicates TSE. PrP

CC of PrP that is occluded when the PrP is in an aggregated state.

SQ Sequence 217 AA:

Query Match 93.2%; Score 41; DB 21; Length 217;

Best Local Similarity 77.8%; Pred. No. 2.6;

Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GDXEDRY 9

DB 129 GSDYEDRY 137

RESULT 14

AAW70261

ID AAW70261 standard; Protein; 219 AA.

AC AAW70261;

XX 13-NOV-1998 (first entry)

DT 13-NOV-1998 (first entry)

XX Bovine prion protein.

DE Prion protein; PrP; cow; disease-specific prion protein; scrapie; Kuru;

XX Prion disease detection; bovine spongiform encephalopathy; therapy;

KW Creutzfeldt-Jakob disease; Gerstmann-Strausler-Scheinker syndrome;

KW Fatal Familial Insomnia.

XX Bos taurus.

OS EP861900-A1.

XX 02-SEP-1998.

PD 21-FEB-1997; 97EP-0102837.

XX 21-FEB-1997; 97EP-0102837.

PR 21-FEB-1997; 97EP-0102837.

XX (ERZI-) ERZIEHUNGSDIREKTION CANTON ZURICH.

PA Korth C, Moser M, Oesch B, Stierli B, Strelet P;

PI WPI; 1998-449112/39.

DR N-PSDB; AAV33005.

XX New monoclonal antibodies specifically bind to disease-specific

XX prion proteins - used to diagnose, prevent and treat prion diseases

XX e.g. bovine spongiform encephalopathy, scrapie and

XX Creutzfeldt-Jakob disease

PS Disclosure: Page 20-21; 35pp; English.

CC This sequence represents the bovine prion protein (PrP). The protein

CC is targeted by the antibody of the invention, which is a monoclonal

CC antibody or fragment capable of specifically binding to native and

CC denatured normal (PrP^c) and disease-specific prion protein (PrP^{Sc}) in an

CC antigen-antibody complex. The antibodies that immunoreact with

CC disease-specific prion proteins are used in test kits for the diagnosis

CC of prion diseases and to detect disease-specific PrP in biological

CC material by treatment of a probe of the material with proteinase K and

CC then with the monoclonal antibody. The monoclonal antibodies are used for

CC the prevention and treatment of prion diseases and to clear biological

CC material from prions. The antibodies are used to diagnose, treat and

CC prevent e.g. bovine spongiform encephalopathy, scrapie in sheep and

CC Creutzfeldt-Jakob disease, Gerstmann-Strausler-Scheinker syndrome, Fatal

CC Familial Insomnia and Kuru in humans. The diagnostic method allows mass

CC screening of infected cattle tissue at a subclinical stage and reduces

CC possible human health risks.

SQ Sequence 219 AA:

Query Match 93.2%; Score 41; DB 19; Length 219;

Best Local Similarity 77.8%; Pred. No. 2.6;

Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GDXEDRY 9

DB 130 GSDYEDRY 138

RESULT 15

AAW93571

ID AAW93571 standard; Protein; 219 AA.

AC AAW93571;

XX 17-JUN-1999 (first entry)

DT 17-JUN-1999 (first entry)

XX Bovine rPrP protein.

DE Prion protein; PrP; rPrP; disease specific isoform; PrP(Sc); vaccine;

XX treatment; diagnosis; Scrapie; BSE; Kuru; Creutzfeldt-Jacob disease;

KW detection.

XX Bos taurus.

OS DE19741607-A1.

XX 25-MAR-1999.

PD 20-SEP-1997; 97DE-1041607.

XX 20-SEP-1997; 97DE-1041607.

PR 20-SEP-1997; 97DE-1041607.

XX (PRIO-) PRIONICS AG.

PA Korth C, Moser M, Oesch B;

PI WPI; 1999-205964/18.

DR New polypeptides comprising prion protein sequences - useful for

XX diagnosis or treatment of prion diseases e.g. scrapie, BSE and

XX Creutzfeldt-Jacob disease

PS Claim 13; Page 6-7; 12pp; German.

XX This invention describes a synthetic polypeptide comprising at least one

XX "defined" PrP (prion protein) sequence or sequences derived therefrom

XX that are recognised by a disease specific isoform of PrP, e.g. PrP(Sc),

XX binding substances. The new prion protein polypeptides are useful in

XX vaccines and pharmaceuticals for treatment of, and as diagnostic agents

XX for diagnosis of Scrapie, BSE, Kuru and Creutzfeldt-Jacob disease. The

XX polypeptides are also useful in pharmaceutical or chemical libraries for

XX detection of PrP(Sc)-specific agents.

SQ Sequence 219 AA:

Query Match 93.2%; Score 41; DB 20; Length 219;

Best Local Similarity 77.8%; Pred. No. 2.6;

Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GDXEDRY 9

DB 130 GSDYEDRY 138

Wed Mar 26 09:13:00 2003

us-09-508-828b-1.rag

Page 9

Search completed: March 24, 2003, 17:19:40
Job time : 26.6875 secs

5

GenCore version 5.1.4.p5.4578
Copyright (c) 1993 - 2003 CompuGen Ltd.

OW protein - protein search, using sw model

Run on: March 24, 2003, 17:22:16 ; Search time 11.25 Seconds
(without alignments)
76.908 Million cell updates/sec

Title: US-09-508-828B-1
Perfect score: 44
Sequence: 1 GDXEDRY 9

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283224 seqs, 96134422 residues
Total number of hits satisfying chosen parameters: 283224

Minimum DB seq length: 0
Maximum DB seq length: 2000000000
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : PIR_73:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	41	93.2	253	1 UJHU	major prion protel
2	41	93.2	253	1 I37032	major prion protel
3	41	93.2	253	2 161847	major prion protel
4	41	93.2	253	2 S53635	prion protein - si
5	41	93.2	253	2 S53617	major prion protel
6	41	93.2	253	2 S53614	major prion protel
7	41	93.2	253	2 S37137	prion protein - gr
8	41	93.2	253	2 A54330	major prion protel
9	41	93.2	253	2 S71041	major prion protel
10	40	90.9	239	2 S53633	major prion protel
11	40	90.9	241	2 S71056	major prion protel
12	40	90.9	241	2 S71048	major prion protel
13	40	90.9	245	2 S53627	major prion protel
14	40	90.9	245	2 S71045	major prion protel
15	40	90.9	252	2 161848	major prion protel
16	40	90.9	252	2 S53634	major prion protel
17	40	90.9	252	2 S53631	major prion protel
18	40	90.9	252	2 JC6175	prion protein - ra
19	40	90.9	253	2 184423	major prion protel
20	40	90.9	253	2 S53618	major prion protel
21	40	90.9	253	2 S53619	major prion protel
22	40	90.9	253	2 S53620	major prion protel
23	40	90.9	253	2 S71055	major prion protel
24	40	90.9	253	2 S53623	major prion protel
25	40	90.9	253	2 S53624	major prion protel
26	40	90.9	253	2 S53625	major prion protel
27	40	90.9	253	2 S53616	major prion protel
28	40	90.9	256	2 JU0268	major prion protel
29	40	90.9	256	2 S37149	prion protein - go

ALIGNMENTS

RESULT 1

UJHU
major prion protein precursor - human
N:Alternate names: 11K amyloid protein; 27-30Kialogycoprotein; PrP 27-30; PrP 33-3
C:Species: Homo sapiens (man)
C:Date: 25-Oct-1987 #sequence-revision 12-Apr-1996 #text-change 16-Jun-2000
C:Accession: A24173; A40372; A05017; S14078; I54322; I68597; I58135; I59184; I79633;
R:Kretzschmar, H.A.; Stowling, L.E.; Westaway, D.; Stubblebine, W.H.; Prusiner, S.B.;
DNA 5: 315-324, 1986
A:Title: Molecular cloning of a human prion protein cDNA.
A:Reference number: A24173; MUID:86300093; PMID:3755672
A:Accession: A24173
A:Molecule type: mRNA
A:Residues: 1-253 <RES>
A:Cross-references: GB:M13899; NID:g190467; PIDN:AAA60182.1; PID:g190468
R:Puckett, C.; Concannon, P.; Casey, C.; Hood, L.
Am. J. Hum. Genet. 49, 320-329, 1991
A:Title: Genomic structure of the human prion protein gene.
A:Reference number: A40372; MUID:91328137; PMID:1678248
A:Accession: A40372
A:Status: not compared with conceptual translation
A:Molecule type: DNA
A:Residues: 1-80, 89-253 <PUC>
A:Cross-references: GB:X83416; NID:g747846; PIDN:CAA58442.1; PID:g747847
A:Note: the deletion may be a polymorphism; the alternative deletion of 82-89 could n
R:Liaw, Y.C.J.; Lebo, R.V.; Clawson, G.A.; Smuckler, E.A.
Science 233, 364-367, 1986
A:Reference number: A05017; MUID:86261778; PMID:3014653
A:Accession: A05017
A:Molecule type: mRNA
A:Residues: 8-117, 119-253 <LIA>
A:Cross-references: GB:D00015; NID:g220015; PIDN:BAA00011.1; PID:g220016; GB:M13667;
R:Tagliavini, F.; Prelli, F.; Ghiso, J.; Bugiani, O.; Serban, D.; Prusiner, S.B.; Far
EMBO J. 10, 513-519, 1991
A:Title: Amyloid protein of Gerstmann-Strausler-Scheinker disease (Indiana kindred)
A:Reference number: S14078; MUID:91160504; PMID:1672107
A:Accession: S14078
A:Molecule type: protein
A:Residues: 58-72, 'X', 74-76, 'XX', 79, 'XXX', 83-86, 111-128, 'V', 130-150 <TAG>
R:Diedrich, J.F.; Knopman, D.S.; List, J.E.; Olson, K.; Frey, W.H.
Hum. Mol. Genet. 1, 443-444, 1992
A:Title: Deletion in the prion protein gene in a demented patient.
A:Reference number: I54322; MUID:93250789; PMID:1363802
A:Accession: I54322
A:Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 9-83, 92-240 <RES>
A:Cross-references: GB:M61929; NID:g190517; PIDN:AA59442.1; PID:g190518
A:Accession: I68597
A:Status: translated from GB/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 8-240 <RES>


```

161847
major prion protein precursor - chimpanzee
C:Species: Pan troglodytes (chimpanzee)
C>Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change 13-Aug-1999
C:Accession: 161847; S71060; S53615
R:Gervanokova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Petrone, K.; Rubenstein, R.
Proc. Natl.Acad. Sci. U.S.A. 91, 12159-12162, 1994
A>Title: Infectious amyloid precursor gene sequences in primates used for experimental
A:Reference number: I36907; MUID:95083661; PMID:7991600
A:Accession: 161847
A>Status: translated from GB/EMBL/DDBJ
A:Molecule type: DNA
A:Residues: 1-253 <RES>
A:Cross-references: EMBL:U15039; NID:g609303; PIDN:AAA68632.1; PID:g609304
R:Schnatzl, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71060
A:Molecule type: DNA
A:Residues: 1-253 <SCW>
A:Cross-references: EMBL:U08296; NID:g474350; PIDN:AAC50085.1; PID:g474351
R:Schnatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A>Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53615
A>Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-210, 'R', 212-253 <SCH>
A:Cross-references: EMBL:U08296
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane

Query Match      93.2%   Score 41; DB 2; Length 253;
Best Local Similarity 77.8%; Pred. No. 0.42;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY      1 GDXDXYRY 9
          | | |||||
Db      142 GSDYEDRY 150

RESULT 4
S53635
prion protein - siamang
C:Species: Hylobates syndactylus (siamang)
C>Date: 15-Jul-1995 #sequence_revision 19-Apr-1996 #text_change 13-Aug-1999
C:Accession: S53635
R:Schaetzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A>Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53635
A>Status: nucleic acid sequence not shown; translation not shown
A:Molecule type: DNA
A:Residues: 1-253 <SCH>
A:Cross-references: EMBL:U08308; NID:g474374; PIDN:AAC50096.1; PID:g474375
A>Note: The source was designated as Symphalangis syndactylus
A>Note: The nucleotide sequence was submitted to the EMBL Data Library, April 1994
C:Superfamily: major prion protein

Query Match      93.2%   Score 41; DB 2; Length 253;
Best Local Similarity 77.8%; Pred. No. 0.42;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY      1 GDXDXYRY 9
          | | |||||
Db      142 GSDYEDRY 150
```

C:Species: Hylobates lar (common gibbon, white-handed gibbon)
 C>Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 13-Aug-1999
 C:Accession: S53617; S71050
 R:Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 J. Mol. Biol. 245, 362-374, 1995
 A:Title: Pilon protein gene variation among primates.
 A:Reference number: S53614; MUID:95139066; PMID:7837269
 A:Accession: S53617
 A:Status: nucleic acid sequence not shown
 A:Molecule type: DNA
 A:Residues: 1-253 <SCH>
 A:Cross-references: EMBL:008299
 R:Schatz, H.M.
 submitted to the EMBL Data Library, April 1994
 A:Reference number: S71041
 A:Accession: S71050
 A:Molecule type: DNA
 A:Residues: 1-210, 'E', 212-253 <SCH>
 A:Cross-references: EMBL:008299; NID:g474356; PIDN:AAC50088.1; PID:g474357
 C:Superfamily: major prion protein
 C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane pro

Query Match 93.2%; Score 41; DB 2; Length 253;
 Best Local Similarity 77.8%; Pred. No. 0.42;
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GDXEDRY 9
 Db 142 GSDYEDRY 150

RESULT 6

S53614
 major prion protein - gorilla
 C:Species: Gorilla gorilla (gorilla)
 C>Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 13-Aug-1999
 C:Accession: S53614; S71049
 R:Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 J. Mol. Biol. 245, 362-374, 1995
 A:Title: Pilon protein gene variation among primates.
 A:Reference number: S53614; MUID:95139066; PMID:7837269
 A:Accession: S53614
 A:Status: nucleic acid sequence not shown
 A:Molecule type: DNA
 A:Residues: 1-253 <SCH>
 A:Cross-references: EMBL:008300
 R:Schatz, H.M.
 submitted to the EMBL Data Library, April 1994
 A:Reference number: S71041
 A:Accession: S71049
 A:Molecule type: DNA
 A:Residues: 1-210, 'E', 212-253 <SCH>
 A:Cross-references: EMBL:008300; NID:g474356; PIDN:AAC50089.1; PID:g474359
 C:Superfamily: major prion protein
 C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane pro

Query Match 93.2%; Score 41; DB 2; Length 253;
 Best Local Similarity 77.8%; Pred. No. 0.42;
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GDXEDRY 9
 Db 142 GSDYEDRY 150

RESULT 7

S37137
 prion protein - greater kudu
 C:Species: Tragelaphus strepsiceros (greater kudu)
 C>Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 13-Aug-1999
 C:Accession: S37137
 R:Marlin, T.C.; Hughes, S.L.; Hughes, K.J.; Dawson, M.
 submitted to the EMBL Data Library, August 1993

A:Reference number: S37137
 A:Accession: S37137
 A:Status: preliminary
 A:Molecule type: DNA
 A:Residues: 1-264 <MAR>
 A:Cross-references: EMBL:X74771; NID:g398937; PIDN:CAA52781.1; PID:g398938
 C:Superfamily: major prion protein

Query Match 93.2%; Score 41; DB 2; Length 264;
 Best Local Similarity 77.8%; Pred. No. 0.44;
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GDXEDRY 9
 Db 153 GSDYEDRY 161

RESULT 8

A54330
 major prion protein 1 precursor - bovine
 N:Alternate names: prion protein, long variant, PrP protein
 C:Species: Bos primigenius taurus (cattle)
 C>Date: 09-Sep-1994 #sequence_revision 09-Sep-1994 #text_change 02-Mar-2001
 C:Accession: A54330; J0953; J0952; A48351; S07347; I46931
 R:Goldmann, W.; Hunter, N.; Marlin, T.; Dawson, M.; Hope, J.
 J. Gen. Virol. 72, 201-204, 1991
 A:Title: Different forms of the bovine PrP gene have five or six copies of a short, G
 A:Reference number: A54330; MUID:91116314; PMID:1671225
 A:Accession: A54330
 A:Molecule type: DNA
 A:Residues: 1-264 <GOU>
 A:Cross-references: GB:X55882; NID:g683; PIDN:CAA39368.1; PID:g684
 R:Yoshimoto, J.; Iinuma, T.; Ishiguro, N.; Horluchi, M.; Imamura, M.; Shinagawa, M.
 submitted to JIPID, November 1991
 A:Reference number: J0952
 A:Accession: J0953
 A:Molecule type: DNA
 A:Residues: 1-264 <YOS>
 A:Cross-references: GB:DI0613; NID:g217595; PIDN:BA01468.1; PID:g217596
 A:Reference number: A48551; MUID:93118243; PMID:1362024
 A:Accession: A48551
 A:Molecule type: mRNA
 A:Residues: 1-217, 'K', 219-264 <Y02>
 R:Yoshimoto, J.; Iinuma, T.; Ishiguro, N.; Horluchi, M.; Imamura, M.; Shinagawa, M.
 Virus Genes 6, 343-356, 1992
 A:Title: Comparative sequence analysis and expression of bovine PrP gene in mouse L-9
 A:Reference number: A48551; MUID:93118243; PMID:1362024
 A:Accession: A48551
 A:Molecule type: mRNA
 A:Residues: 1-217, 'K', 219-264 <Y03>
 A:Cross-references: GB:AB001468; NID:g1888342; PIDN:BA19253.1; PID:g1888343
 A:Experimental source: brain
 A:Note: sequence extracted from NCBI backbone (NCBI:121620, NCBI:121621)
 R:Hope, J.; Reekie, J.D.; Hunter, N.; Mulhapp, G.; Beyreuther, K.; White, H.; Scot
 Nature 336, 390-392, 1988
 A:Title: Fibrils from brains of cows with new cattle disease contain scrapie-associat
 A:Reference number: S07347; MUID:89057122; PMID:2904126
 A:Accession: S07347
 A:Molecule type: protein
 A:Residues: 25-36 <ROP>
 R:Prusiner, S.B.; Puzi, M.; Scott, M.; Serban, D.; Serban, H.; Taraboulos, A.; Gabrie
 J. Infect. Dis. 167, 602-613, 1993
 A:Title: Immunologic and molecular biologic studies of prion proteins in bovine spong
 A:Reference number: I46931; MUID:93179783; PMID:8440932
 A:Accession: I46931
 A:Status: preliminary; translated from GB/EMBL/DBJ
 A:Molecule type: mRNA
 A:Residues: 1-264 <PRD>
 A:Cross-references: GB:S55629; NID:g266111; PIDN:AB25514.1; PID:g266112
 C:Genetics:
 A:Gene: PrP
 C:Superfamily: major prion protein
 C:Keywords: glycoprotein; phosphatidylinositol linkage; polymorphism; tandem repeat
 F:1-24/Domain: signal sequence #status predicted <SIG>

F:25-264/Product: major prion protein 1 #status predicted <M>
 F:60-99/Region: 8-residue repeats (W-G-Q-P-H-G-G)
 F:190-235/Disulfide bonds: #status predicted
 F:192,208/Binding site: carbohydrate (asn) (covalent) #status predicted

Query Match 93.2%; Score 41; DB 2; Length 264;
 Best Local Similarity 77.8%; Pred. No. 0.44;
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1 GDXEDRY 9
 Db 153 GSDYEDRY 161

RESULT 9

major prion protein - black-handed spider monkey (fragment)

C:Species: Ateles geoffroyi (black-handed spider monkey)
 C>Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 13-Aug-1999
 C:Accession: S71041; S53630
 R:Schatz, H.M.
 Submitted to the EMBL Data Library, April 1994
 A:Reference number: S71041
 A:Accession: S71041
 A:Molecule type: DNA

A:Residues: 1-232 <SCH>
 A:Cross-references: EMBL:U08309; NID:9474376; PIDN:AAC50097.1; PID:9474377
 R:Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; MUID:95139066; PMID:7837269

A:Accession: S53630
 A:Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 1-194, 'R', 196-231 <SCW>

A:Cross-references: EMBL:U08309

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane pro

Query Match 90.9%; Score 40; DB 2; Length 232;
 Best Local Similarity 77.8%; Pred. No. 0.62;

Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GDXEDRY 9
 Db 126 GNDYEDRY 134

RESULT 10

major prion protein - douroucouli (fragment)

C:Species: Aotus trivirgatus (douroucouli, night monkey, owl monkey)
 C>Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 13-Aug-1999
 C:Accession: S53633; S71042

R:Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; MUID:95139066; PMID:7837269

A:Accession: S53633

A:Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 1-239 <SCH>

A:Cross-references: EMBL:U08293

R:Schatz, H.M.

Submitted to the EMBL Data Library, April 1994

A:Reference number: S71041

A:Accession: S71042

A:Molecule type: DNA

A:Residues: 1-202, 'E', 204-239 <SCW>

A:Cross-references: EMBL:U08293; NID:9474344; PIDN:AAC50092.1; PID:9474345

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane pro

Query Match 90.9%; Score 40; DB 2; Length 239;
 Best Local Similarity 77.8%; Pred. No. 0.64;
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GDXEDRY 9
 Db 134 GNDYEDRY 142

RESULT 11

major prion protein - mandrill (fragment)

C:Species: Papio sphinx, Mandrillus sphinx (mandrill)
 C>Date: 27-Oct-1996 #sequence_revision 14-Feb-1997 #text_change 13-Aug-1999
 C:Accession: S71056; S53621
 R:Schatz, H.M.

Submitted to the EMBL Data Library, April 1994

A:Reference number: S71041

A:Accession: S71056

A:Molecule type: DNA

A:Residues: 1-241 <SCH>

A:Cross-references: EMBL:U08303; NID:9474364; PIDN:AAC50091.1; PID:9474365

R:Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; MUID:95139066; PMID:7837269

A:Accession: S53621

A:Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 1-203, 'R', 205-240 <SCW>

A:Cross-references: EMBL:U08303

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane

Query Match 90.9%; Score 40; DB 2; Length 241;
 Best Local Similarity 77.8%; Pred. No. 0.64;

Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GDXEDRY 9
 Db 135 GNDYEDRY 143

RESULT 12

major prion protein - Calliobus moloch (fragment)

C:Species: Calliobus moloch
 C>Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 13-Aug-1999
 C:Accession: S71048; S53632
 R:Schatz, H.M.

Submitted to the EMBL Data Library, April 1994

A:Reference number: S71041

A:Accession: S71048

A:Molecule type: DNA

A:Residues: 1-241 <SCH>

A:Cross-references: EMBL:U08312; NID:9475585; PIDN:AAC50100.1; PID:9475586

R:Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; MUID:95139066; PMID:7837269

A:Accession: S53632

A:Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 1-203, 'R', 205-240 <SCW>

A:Cross-references: EMBL:U08312

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane

Query Match 90.9%; Score 40; DB 2; Length 241;
 Best Local Similarity 77.8%; Pred. No. 0.64;
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GDXEDRY 9

DB 135 GNDYEDRY 143

RESULT 13

major prion protein - green monkey
 C:Species: Cercopithecus aethiops (green monkey, grivet)
 C>Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 13-Aug-1999
 C:Accession: S53627; S71043
 R:Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 J. Mol. Biol. 245, 362-374, 1995
 A:Title: Prion protein gene variation among primates.
 A:Reference number: S53614; MUID:95139066; PMID:7837269
 A:Accession: S53627
 A:Status: nucleic acid sequence not shown
 A:Molecule type: DNA
 A:Residues: 1-245 <SCH>
 A:Cross-references: EMBL:U08291; NID:g474340; PIDN:AAC50080.1; PID:g474341
 C:Superfamily: major prion protein
 C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane pro

Query Match 90.9%; Score 40; DB 2; Length 245;
 Best Local Similarity 77.8%; Pred. No. 0.65;

Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GNDYEDRY 9
 DB 134 GNDYEDRY 142

RESULT 14

major prion protein - Cercopithecus diana
 C:Species: Cercopithecus diana
 C>Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 13-Aug-1999
 C:Accession: S71045; S53628
 R:Schatzl, H.M.
 * submitted to the EMBL Data Library, April 1994
 A:Reference number: S71041
 A:Accession: S71045
 A:Molecule type: DNA
 A:Residues: 1-245 <SCH>
 A:Cross-references: EMBL:U08292; NID:g474342; PIDN:AAC50081.1; PID:g474343
 R:Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 J. Mol. Biol. 245, 362-374, 1995
 A:Title: Prion protein gene variation among primates.
 A:Reference number: S53614; MUID:95139066; PMID:7837269
 A:Accession: S53628
 A:Status: nucleic acid sequence not shown
 A:Molecule type: DNA
 A:Residues: 8-10, 'L', 12-202, 'R', 204-239 <SCW>
 A:Cross-references: EMBL:U08292
 C:Superfamily: major prion protein
 C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane pro

Query Match 90.9%; Score 40; DB 2; Length 245;
 Best Local Similarity 77.8%; Pred. No. 0.65;

Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GNDYEDRY 9
 DB 134 GNDYEDRY 142

RESULT 15

161848
 major prion protein precursor - common squirrel monkey
 C:Species: Saimiri sciureus (common squirrel monkey)
 C>Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change 13-Aug-1999
 C:Accession: I61848
 R:Cervenakova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Petrone, K.; Rubenstein, R.
 Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994
 A:Title: Infectious amyloid precursor gene sequences in primates used for experimental
 A:Reference number: I36907; MUID:95083661; PMID:7991600
 A:Accession: I61848
 A:Status: preliminary; translated from GB/EMBL/DBJ
 A:Molecule type: DNA
 A:Residues: 1-252 <RES>
 A:Cross-references: EMBL:U15165; NID:g595852; PIDN:AA68636.1; PID:g595853
 C:Superfamily: major prion protein

Query Match 90.9%; Score 40; DB 2; Length 252;
 Best Local Similarity 77.8%; Pred. No. 0.68;

Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GNDYEDRY 9
 DB 141 GNDYEDRY 149

Search completed: March 24, 2003, 17:24:13
 Job time : 12.25 secs

GenCore version 5.1.4.p5.4578
Copyright (c) 1993 - 2003 Compugen Ltd.

OM protein - protein search, using sw model

Run on: March 24, 2003, 17:17:23 ; Search time 5.4375 Seconds

(without alignments)
68,650 Million cell updates/sec

Title: US-09-508-828B-1

Perfect score: 44
Sequence: 1 GDXEDRY 9

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 112892 seqs, 41476328 residues

Total number of hits satisfying chosen parameters: 112892

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : SwissProt_40:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	41	93.2	253	1	P40252 gorilla gor
2	41	93.2	253	1	P04156 homo sapien
3	41	93.2	253	1	P40253 pan troglod
4	41	93.2	256	1	P40243 tragalaphus
5	41	93.2	257	1	P49927 sus scrofa
6	41	93.2	264	1	P10279 bos taurus
7	41	93.2	264	1	P40242 tragalaphus
8	40	90.9	232	1	P40246 atelaf geof
9	40	90.9	238	1	P05145 cercocebus
10	40	90.9	238	1	P40245 aotus trivi
11	40	90.9	239	1	P40248 callithec
12	40	90.9	241	1	P40255 mandillius
13	40	90.9	241	1	P40250 cercopthec
14	40	90.9	245	1	P05172 cercopthec
15	40	90.9	246	1	P05174 cercopthec
16	40	90.9	246	1	P51446 atelaf panl
17	40	90.9	252	1	P40247 callithec
18	40	90.9	252	1	P40249 cebs apell
19	40	90.9	252	1	P05211 crycolagus
20	40	90.9	252	1	P40251 crycolagus
21	40	90.9	253	1	P40256 pongo pygma
22	40	90.9	253	1	P40256 macaca fasc
23	40	90.9	253	1	P40257 presbytis f
24	40	90.9	253	1	P79141 camelus dro
25	40	90.9	255	1	P79142 cervus hircu
26	40	90.9	256	1	P79143 cervus elap
27	40	90.9	256	1	P18754 felis silve
28	40	90.9	256	1	P47852 odocolleus
29	40	90.9	256	1	P47852 odocolleus
30	40	90.9	256	1	P23907 ovif aries
31	40	90.9	256	1	P01880 bos taurus
32	40	90.9	257	1	P52114 mustela put
33	40	90.9	257	1	P40244 mustela vis

34	40	90.9	260	1	P40258 salmrl scl
35	39	88.6	254	1	P04506 cricetus
36	39	88.6	254	1	P04668 cricetus
37	39	88.6	254	1	P04273 mesocricetu
38	39	88.6	254	1	P04925 mus musculu
39	39	88.6	254	1	P13852 rattus norv
40	39	88.6	254	1	P02073 signodon hl
41	39	88.6	255	1	P04501 canis faml
42	36	81.8	246	1	P05176 cercocebus
43	36	81.8	246	1	P51780 trichosurus
44	32	72.7	754	1	P28056 bos taurus
45	31	70.5	331	1	P082314 arabidopsis

ALIGNMENTS

RESULT 1
PRIO_GORGO
ID PRIO_GORGO STANDARD; PRT; 253 AA.
AC P40252; Q28419;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 15-JUL-1998 (Rel. 36, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).
GN PRNP.
OS Gorilla gorilla gorilla (Lowland gorilla).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Gorilla.
OX NCBI_TaxID=9595;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
RN [2]
RP SEQUENCE FROM N.A.
RX MEDLINE=95083661; PubMed=7991600;
RA Rubenstein R., Dubnick M., Gibbs C.J., Gajdusek D.C.;
RT "Infectious amyloid precursor gene sequences in primates used for experimental transmission of human spongiform encephalopathy.";
RL Proc. Natl. Acad. Sci. U.S.A. 91:12159-12162(1994).
CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.
CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED "KODS".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU, CRETZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE), TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.
CC This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (see <http://www.isb-sib.ch/announce/> or send an email to license@isb-sib.ch).
CC -----
CC EMBL: U08300; AAC50089.1; -;
CC EMBL: U15166; AAA68633.1; -;
CC HSSP: P04156; 10LZ.
CC InterPro: IPR00817; Prion.
CC Pfam: PF00377; prion; 1.
CC PRINTS: PR00341; PRION.
CC SMART: SM00157; PRP; 1.
CC PROSITE: PS00291; PRION_1; 1.

DR PROSITE: PS00706; PRION_2; 1.
 KW PRION; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.
 FT SIGNAL 1 22
 FT CHAIN 23 230
 FT PROPEP 231 253
 FT LIPID 230 230
 FT DISULFID 179 214
 FT CARBOHYD 181 181
 FT CARBOHYD 197 197
 FT DOMAIN 51 91
 FT REPEAT 51 59
 FT REPEAT 60 67
 FT REPEAT 68 75
 FT REPEAT 76 83
 FT REPEAT 84 91
 FT CONFLICT 6 6
 SQ SEQUENCE 253 AA; 27660 MW; E28F4C3PABMCA9E CRC64;
 C -> Y (IN REF. 2).
 Query Match 93.2%; Score 41; DB 1; Length 253;
 Best Local Similarity 77.8%; Pred. No. 0.2;
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1 GDXEDRY 9
 Db 142 GSDYEDRY 150
 ID PRIO_HUMAN STANDARD; PRT; 253 AA.
 AC P04156;
 DT 01-NOV-1986 (Rel. 03, Created)
 DT 01-NOV-1986 (Rel. 03, Last sequence update)
 DT 13-JUN-2002 (Rel. 41, Last annotation update)
 DE Major prion protein precursor (PrP) (PrP33-30) (PrP33-35C) (ASCR)
 DE (CD230 antigen).
 DE PRNP.
 OS Homo sapiens (Human).
 OC Eukaryote; Metazoa; Chordata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.
 OX NCBI_TaxID=9606;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=66300093; PubMed=3755672;
 RA Kretzschmar H.A., Stowring L.E., Westaway D., Stubblebine W.H.,
 RA Prusiner S.B., Dearmond S.J.;
 RT "Molecular cloning of a human prion protein cDNA.";
 RL DNA 5:315-324(1986).
 RN [2]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=21638749; PubMed=11780052;
 RA Delouis P., Matthews L.H., Ashurst J., Burton J., Gilbert J.G.R.,
 RA Jones M., Stavrides G., Almeida J.P., Babbage A.K., Bagguley C.L.,
 RA Bailey J., Bartlow K.F., Bates K.N., Beard L.M., Beare D.M.,
 RA Beasley O.P., Bird C.P., Blakey S.E., Bridgman A.M., Brown A.J.,
 RA Buck D., Burrill W.D., Butler A.P., Carder C., Carter N.P.,
 RA Chapman J.C., Clamp M., Clark G., Clark L.N., Clark S.Y., Clee C.M.,
 RA Clegg S., Cobley V.E., Collier R.E., Connor R.E., Corby N.R.,
 RA Coulson A., Coville G.J., Deaman R., Dhami P.D., Dunn M.,
 RA Ellington A.G., Frankland J.A., Fraser A., French L., Garner P.,
 RA Grafton D.V., Griffiths C., Griffiths M.N.D., Gilliam R., Hall R.E.,
 RA Hammond S., Harley J.L., Heath P.D., Ho S., Holden J.L., Howden P.J.,
 RA Huckle E., Hunt A.R., Hunt S.E., Jekosch K., Johnson C.M., Johnson D.,
 RA Kay M.P., Kimberley A.M., King A., Knights A., Laird G.K., Lawlor S.,
 RA Levasseur M.H., Levesha M.A., Lloyd C., Lloyd D.M., Lovell J.D.,
 RA Marsh V.L., Martin S.L., McConachie L.J., McClay K., McMurtry A.A.,
 RA Milne S.A., Mistry D., Moore M.J.F., Mullikin J.C., Nickerson T.,
 RA Oliver K., Parker A., Patel R., Pearce T.A.V., Peck A.I.,
 RA Phillimore B.J.C.T., Prathalingam S.R., Plumb R.W., Ramsay H.,
 RA Rice C.M., Ross M.T., Scott C.E., Selva H.K., Shonkhen R., Sims S.,
 RA Skuce C.D., Smith M.L., Soderlund C., Steward C.A., Sulston J.E.,
 RA Swann R.M., Sycamore N., Taylor R., Tee L., Thomas D.W., Thorpe A.,

RA Tracey A., Tromans A.C., Vaudin M., Wall M., Wallis J.M.,
 RA Whitehead S.L., Whitaker P., Willey D.L., Williams L., Williams S.A.,
 RA Wilning L., Wray P.W., Hubbard T., Durbin R.M., Bentley D.R., Beck S.,
 RA Rogers J.;
 RT "The DNA sequence and comparative analysis of human chromosome 20.";
 RL Nature 414:865-871(2001).
 RN [3]
 RP SEQUENCE OF 8-253 FROM N.A.
 RX MEDLINE=86261778; PubMed=3014653;
 RA Liao Y.-C.J., Lebo R.V., Clawson G.A., Smuckler E.A.;
 RT "Human prion protein cDNA: molecular cloning, chromosomal mapping,
 RT and biological implications.";
 RL Science 233:364-367(1986).
 RN [4]
 RP SEQUENCE OF 58-85 AND 111-150 (VARIANT AMYLOID GSS).
 RX MEDLINE=91160504; PubMed=1672107;
 RA Tagliavini F., Prelli F., Ghiso J., Bugiani O., Serban D.,
 RA Prusiner S.B., Farlow M.R., Ghetti B., Frangione B.;
 RT "Amyloid protein of Gerstmann-Strausler-Scheinker disease (Indiana
 RT kindred) is an 11 kd fragment of prion protein with an N-terminal
 RT glycine at codon 58.";
 RL EMBO J. 10:513-519(1991).
 RN [5]
 RP STRUCTURE BY NMR OF 23-230.
 RX MEDLINE=20087216; PubMed=10618385;
 RA Zahn R., Liu A., Luhrs T., Riek R., von Schroetter C.,
 RA Lopez Garcia F., Billeter M., Calzolari L., Wider G., Wuthrich K.;
 RT "NMR solution structure of the human prion protein.";
 RL Proc. Natl. Acad. Sci. U.S.A. 97:145-150(2000).
 RN [6]
 RP STRUCTURE BY NMR OF 118-221.
 RX MEDLINE=20359708; PubMed=10900000;
 RA Calzolari L., Lysek D.A., Guntert P., von Schroetter C., Riek R.,
 RA Zahn R., Wuthrich K.;
 RT "NMR structures of three single-residue variants of the human prion
 RT protein.";
 RL Proc. Natl. Acad. Sci. U.S.A. 97:8340-8345(2000).
 RN [7]
 RP REVIEW ON VARIANTS.
 RX MEDLINE=93372867; PubMed=8364585;
 RA Palmer M.S., Collinge J.;
 RT "Mutations and polymorphisms in the prion protein gene.";
 RL Hum. Mutat. 2:168-173(1993).
 RN [8]
 RP REVIEW ON VARIANTS.
 RX MEDLINE=94029646; PubMed=8105771;
 RA Prusiner S.B.;
 RT "Genetic and infectious prion diseases.";
 RL Arch. Neurol. 50:1129-1133(1993).
 RN [9]
 RP VARIANT GSS LEU-102.
 RX MEDLINE=89159433; PubMed=2564168;
 RA Hsiao K., Baker H.F., Crow T.J., Poulter M., Owen F.,
 RA Terwilliger J.D., Westaway D., Ott J., Prusiner S.B.;
 RT "Linkage of a prion protein missense variant to Gerstmann-Strausler
 RT syndrome.";
 RL Nature 338:342-345(1989).
 RN [10]
 RP VARIANTS LEU-102; VAL-117 AND VAL-129.
 RX MEDLINE=89392018; PubMed=2783132;
 RA Doh-Ura K., Tateishi J., Sasaki H., Kitamoto T., Sakaki Y.;
 RT "Pro-->Leu change at position 102 of prion protein is the most
 RT common but not the sole mutation related to Gerstmann-Strausler
 RT syndrome.";
 RL Blochem. Biophys. Res. Commun. 163:974-979(1989).
 RN [11]
 RP VARIANT FFI ASN-178.
 RX MEDLINE=92195483; PubMed=1347910;
 RA Medori R., Montagna P., Tritschler H.J., Leblanc A., Cortelli P.,
 RA Tinuper P., Lugaresi E., Gambetti P.;
 RT "Fatal familial insomnia: a second kindred with mutation of prion
 RT protein gene at codon 178.";
 RL Neurology 42:669-670(1992).

RN [121]
 RP VARIANT CJD ASN-178.
 RX MEDLINE-91124933; PubMed-1671440;
 RA Goldfarb L.G., Haltia M., Brown P., Nieto A., Kovanen J.,
 RA McCombe W.R., Trapp S., Gajdusek D.C.;
 RT "New mutation in scrapie amyloid precursor gene (at codon 178) in
 RT Finnish Creutzfeldt-Jakob kindred.";
 RL Lancet 337:425-425(1991).
 RN [13]
 RP VARIANT CJD LYS-200.
 RX MEDLINE-90355709; PubMed-1975028;
 RA Goldfarb L., Mitoava E., Brown P., Toh B.K., Gajdusek D.C.;
 RT "Mutation in codon 200 of scrapie amyloid protein gene in two clusters
 RT of Creutzfeldt-Jakob disease in Slovakia.";
 RL Lancet 336:514-515(1990).
 RN [14]
 RP VARIANT GSS ARG-217.
 RX MEDLINE-93250977; PubMed-1363810;
 RA Hsiao K., Dlouhy S.R., Farlow M.R., Cass C., da Costa M.,
 RA Conneally P.M., Hodges M.E., Ghetti B., Prusiner S.B.;
 RT "Mutant prion proteins in Gerstmann-Strausler-Scheinker disease with
 RT neurofibrillary tangles.";
 RL Nat. Genet. 1:68-71(1992).
 RN [15]
 RP VARIANT CJD ILE-180 AND ARG-232.
 RX MEDLINE-93213314; PubMed-8461023;
 RA Kitamoto T., Ohta M., Doh-Ura K., Hitoshi S., Terao Y., Tateishi J.;
 RT "Novel missense variants of prion protein in Creutzfeldt-Jakob
 RT disease or Gerstmann-Strausler syndrome.";
 RL Biochem. Biophys. Res. Commun. 191:709-714(1993).
 RN [16]
 RP VARIANT CJD ILE-210.
 RX MEDLINE-94071412; PubMed-7902693;
 RA Pocchiari M., Salvatore M., Cutruzzola F., Gennardi M.,
 RA Alletcilli C.T., Masullo C., Macchi G., Alema G., Gagliani S., XI Y.G.,
 RA Petraroli R., Silvestrini M.C., Brunori M.;
 RT "A new point mutation of the prion protein gene in Creutzfeldt-Jakob
 RT disease.";
 RL Ann. Neurol. 34:802-807(1993).
 RN [17]
 RP VARIANT GSS LEU-105.
 RX MEDLINE-94077414; PubMed-7902972;
 RA Yamada M., Itoh Y., Fujigasaki H., Naruse S., Kaneko K., Kitamoto T.,
 RA Tateishi J., Ohtomo E., Hayakawa M., Tanaka J., Matsushita M.,
 RA Miyake T.;
 RT "A missense mutation at codon 105 with codon 129 polymorphism of the
 RT prion protein gene in a new variant of Gerstmann-Strausler-Scheinker
 RT disease.";
 RL Neurology 43:2723-2724(1993).
 RN [18]
 RP VARIANT GSS LEU-105.
 RX MEDLINE-95213742; PubMed-7699395;
 RA Itoh Y., Yamada M., Hayakawa M., Shozawa T., Tanaka J., Matsushita M.,
 RA Kitamoto T., Tateishi J., Ohtomo E.;
 RT "A variant of Gerstmann-Strausler-Scheinker disease carrying codon
 RT 105 mutation with codon 129 polymorphism of the prion protein gene: a
 RT clinicopathological study.";
 RL J. Neurol. Sci. 127:77-86(1994).
 RN [19]
 RP VARIANT CJD LYS-200.
 RX MEDLINE-94142912; PubMed-7906019;
 RA Inoue I., Kitamoto T., Doh-Ura K., Shii H., Goto I., Tateishi J.;
 RT "Japanese family with Creutzfeldt-Jakob disease with codon 200 point
 RT mutation of the prion protein gene.";
 RL Neurology 44:299-301(1994).
 RN [20]
 RP VARIANT CJD LYS-200.
 RX MEDLINE-94316708; PubMed-7913755;
 RA Gagliani S., Rosenman H., Weiner Z., Kahana I., Kahana E., Shugart Y.,
 RA Ott J., Prusiner S.B.;
 RT "Mutation in codon 200 and polymorphism in codon 129 of the prion
 RT protein gene in Libyan Jews with Creutzfeldt-Jakob disease.";
 RL Philos. Trans. R. Soc. Lond., B, Biol. Sci. 343:385-390(1994).

RN [21]
 RP VARIANT GSS LEU-102.
 RX MEDLINE-95303274; PubMed-7783876;
 RA Young K., Jones C.K., Piccardo P., Lazzarini A., Golbe L.I.,
 RA Zimmerman T.R., Dickson D.W., McLachlan D.C., St George-Hyslop P.H.,
 RA Lennox A.;
 RT "Gerstmann-Strausler-Scheinker disease with mutation at codon 102
 RT and methionine at codon 129 of PRNP in previously unreported
 RT patients.";
 RL Neurology 45:1127-1134(1995).
 RN [22]
 Query Match 93.2%; Score 41; DB 1; Length 253;
 Best Local Similarity 77.8%; Pred. No. 0.2;
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Caps 0;
 QY 1 GADKEDRY 9
 DB 142 GSDYEDRY 150
 RESULT 3
 PRO_PANTR STANDARD; PRT; 253 AA.
 AC P40253;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 30-MAY-2000 (Rel. 39, Last annotation update)
 DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).
 GN PRNP.
 OS Pan troglodytes (Chimpanzee),
 OS Hylobates lar (Common gibbon), and
 OS Hylobates syndactylus (Siamese) (Symphalangus syndactylus).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Pan.
 NC NCBI_TaxID:9598, 9580, 9590;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE-95139066; PubMed-7837269;
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
 RT "Prion protein gene variation among primates.";
 RL J. Mol. Biol. 245:362-374(1995).
 RN [2]
 RP SEQUENCE FROM N.A.
 RX SPECIES-P. troglodytes; TISSUE-Brain;
 RC MEDLINE-95083661; PubMed-7991600;
 RA Cervenakova L., Brown P., Goldfarb L.G., Nagle J., Petrone K.,
 RA Rubenstein R., Dubnick M., Gibbs C.J., Gajdusek D.C.;
 RT "Infectious amyloid precursor gene sequences in primates used for
 RT experimental transmission of human spongiform encephalopathy.";
 RL Proc. Natl. Acad. Sci. U.S.A. 91:12159-12162(1994).
 CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE
 CC HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.
 CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED
 CC "RODS".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
 CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASE KURU,
 CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STAUSLER SYNDROME
 CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
 CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.
 CC THIS SWISS-PROT entry is copyright. It is produced through a collaboration
 CC between the Swiss Institute of Bioinformatics and the EMBL outstation
 CC the European Bioinformatics Institute. There are no restrictions on its
 CC use by non-profit institutions as long as its content is in no way
 CC modified and this statement is not removed. Usage by and for commercial
 CC entities requires a license agreement (see <http://www.isb-sib.ch/announce/>
 CC or send an email to license@isb-sib.ch).
 DR EMBL: U08296; AAC50085.1; -;
 DR EMBL: U08299; AAC50088.1; -;

DR HSSP; P10279; 10WY.
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; prion.1.
 DR PRINTS: PR00341; PRION.
 DR SMART: SM00157; PRP; 1.
 DR PROSITE: PS00291; PRION_1; 1.
 DR PROSITE: PS00706; PRION_2; 1.
 KW Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.
 FT SIGNAL 1 24
 FT CHAIN 25 257
 FT CARBOHYD 185 185 N-LINKED (GLCNAC. . .) (POTENTIAL).
 FT CARBOHYD 201 201 N-LINKED (GLCNAC. . .) (POTENTIAL).
 FT DISULFID 183 218 BY SIMILARITY.
 FT DOMAIN 54 95 5 x 8 AA TANDEM REPEATS OF P-H-G-G-W-G-
 FT REPEAT 54 62 0.
 FT REPEAT 63 70 1.
 FT REPEAT 71 78 2.
 FT REPEAT 79 86 3.
 FT REPEAT 87 95 4.
 FT REPEAT 95 95 5.
 SQ SEQUENCE 257 AA; 27727 MW; 3A87104B234C55DD CRC64;
 Query Match 93.2%; Score 41; DB 1; Length 257;
 Best Local Similarity 77.8%; Pred. No. 0.2; Mismatches 0;
 Matches 7; Conservative 0; Indels 0; Gaps 0;
 Oy 1 GAXDEXRY 9
 Db 146 GSDYEDRY 154
 RESULT 6
 ID PRIO_BOVIN STANDARD: PRT: 264 AA.
 AC P10279:
 DT 01-MAR-1989 (rel. 10, Created)
 DT 01-NOV-1991 (rel. 20, Last sequence update)
 DT 15-JUN-2002 (rel. 41, Last annotation update)
 DE Major prion protein 1 precursor (PrP) (Major scrapie-associated fibril protein 1).
 DE PRNP OR PrP.
 GN Bos taurus (Bovine).
 OS Eukaryota; Chordata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
 OC Bovidae; Bovinae; Bos.
 OC NCBI_TaxID=9913;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC STRAIN-Holstein-Friesian;
 RA GOLDMAN W., Hunter N., Martin T., Dawson M., Hope J.;
 RT short, G-C-rich element within the protein-coding exon.
 RL J. Gen. Virol. 72:201-204 (1991).
 RN [2]
 RN SEQUENCE FROM N.A.
 RC TISSUE-Brain;
 RA MEDLINE-93118243; PubMed-1362024;
 RA Yoshimura J., Iinuma T., Ishiguro N., Horluchi M., Imanura M.,
 RA Shinagawa M.;
 RT Comparative sequence analysis and expression of bovine PrP gene in
 RT mouse L-929 cells.
 RL Virus Genes 6:343-356 (1992).
 RN [3]
 RN SEQUENCE FROM N.A.
 RP MEDLINE-93119783; PubMed-8440932;
 RA Prusiner S.B., Furl M., Scott M., Serban D., Serban H.,
 RA Taraboulos A., Gaidiel J.M., Wells G.A., Willemsmith J.W., Bradley R.;
 RT Immunologic and molecular biologic studies of prion proteins in
 RT bovine spongiform encephalopathy.
 RL J. Infect. Dis. 167:602-613 (1993).
 RN [4]
 RN SEQUENCE FROM N.A.

RC STRAIN-Holstein-Friesian; TISSUE-Brain;
 RA Horluchi M.;
 RL Submitted (FEB-1997) to the EMBL/GenBank/DBJ databases.
 RN [5]
 RN SEQUENCE FROM N.A.
 RC STRAIN-Jersey;
 RA MEDLINE-21422903; PubMed-11531705;
 RA Hills D., Cominclin S., Schlaepfer J., Dolf G., Ferretti L.,
 RA Williams J.L.;
 RT Complete genomic sequence of the bovine prion gene (PRNP) and
 RT polymorphism in its promoter region.
 RL Anim. Genet. 32:231-232 (2001).
 RN [6]
 RN SEQUENCE OF 1-15 FROM N.A.
 RA Tanaka M., Inoue S., Ikeda T., Horluchi M., Ishiguro N., Shinagawa M.;
 RL Submitted (JAN-1994) to the EMBL/GenBank/DBJ databases.
 RN [7]
 RN SEQUENCE OF 25-36.
 RX MEDLINE-89057122; PubMed-2904126;
 RA Hope J., Reekie L.J.D., Hunter N., Multhaup G., Beyreuther K.,
 RA White H., Scott A.C., Stack M.J., Dawson M., Wells G.A.;
 RT "Fibrils from brains of cows with new cattle disease contain scrapie-
 RT associated protein".
 RL Nature 336:390-392 (1988).
 RN [8]
 RN STRUCTURE BY NMR OF 132-241.
 RX MEDLINE-20359707; PubMed-10899999;
 RA Lopez Garcia F., Zahn R., Riek R., Wuehrlich K.;
 RT "NMR structure of the bovine prion protein".
 RL Proc. Natl. Acad. Sci. U.S.A. 97:8334-8339 (2000).
 CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE
 CC HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.
 CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED
 CC "RODS".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND ANIMALS
 CC INFECTED WITH DEGENERATIVE NEUROLOGICAL DISEASES SUCH AS KURU,
 CC CRETZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME
 CC (GSS), SCRAPE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
 CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.
 CC -----
 CC This SWISS-PROT entry is copyright. It is produced through a collaboration
 CC between the Swiss Institute of Bioinformatics and the EMBL Outstation.
 CC the European Bioinformatics Institute. There are no restrictions on its
 CC use by non-profit institutions as long as its content is in no way
 CC modified and this statement is not removed. Usage by and for commercial
 CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
 CC or send an email to license@isb-sib.ch).
 CC -----
 CC EMBL: X55882; CAA39368.1; -
 CC EMBL: D10612; BAA01467.1; -
 CC EMBL: D10613; BAA01468.1; -
 CC EMBL: S55629; AAB25514.1; -
 CC EMBL: AB001468; AAB19253.1; -
 CC EMBL: A2298878; CAC37367.1; -
 CC EMBL: D26151; BAA05138.1; -
 CC EMBL: S07347; S07347.
 CC PIR: J70953; J70953.
 CC PIR: A54330; A54330.
 CC PDB: 1DW2; 20-JUL-00.
 CC PDB: 1DX0; 20-JUL-00.
 CC PDB: 1DX1; 20-JUL-00.
 CC InterPro: IPR001610; PAC.
 CC InterPro: IPR000817; Prion.
 CC Pfam: PF00377; prion.1.
 CC PRINTS: PR00341; PRION.
 CC SMART: SM00157; PRP; 1.
 CC PROSITE: PS00291; PRION_1; 1.
 CC PROSITE: PS00706; PRION_2; 1.
 KW Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal; 3D-structure.

DR SIGNAL 1 24
 FT CHAIN 25 264
 FT CARBOHYD 192 192
 FT CARBOHYD 208 208
 FT DISULFID 190 225
 FT DOMAIN 54 103
 FT REPEAT 54 62
 FT REPEAT 63 70
 FT REPEAT 71 78
 FT REPEAT 79 86
 FT REPEAT 87 94
 FT REPEAT 95 103
 FT VARIANT 71 78
 FT CONFLICT 218 218
 FT SEQUENCE 264 AA; 28614 MW; D6D21A038316A231 CRC64;
 Query Match 93.2%; Score 41; DB 1; Length 264;
 Best Local Similarity 77.8%; Pred. No. 0.21;
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1 GXDXEDRY 9
 DB 153 GSDYEDRY 161
 RESULT 7
 PRP1 TRAST STANDARD; PRT: 264 AA.
 ID PRP1 TRAST STANDARD; PRT: 264 AA.
 AC P40242;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 01-NOV-1997 (Rel. 35, Last annotation update)
 DE Major prion protein 1 precursor (Prp) (Major scrapie-associated fibril protein 1).
 OS Tragalaphus strepsiceros (Greater kudu).
 CC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae; Bovidae; Bovinae; Tragelaphus.
 NC NCBI_TaxID=9946;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Brain;
 RA Martin J.C., Hughes S.L., Hughes K.J., Dawson M.;
 RL Submitted (Aug-1993) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.
 CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED "RODS".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND ANIMALS INFECTED WITH DEGENERATIVE NEUROLOGICAL DISEASES SUCH AS KURU, CRETZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE), TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
 CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.
 CC This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See <http://www.isb-sib.ch/announce/> or send an email to license@isb-sib.ch).
 CC EMBL: X74771; CAA52781.1; -
 DR PIR: S37137; S37137.
 DR HSSP: P10279; IDWY.
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; Prion; 1.
 DR PRINTS: PR00341; PRION.
 DR SMART: SM00157; PRP; 1.
 DR PROSITE: PS00291; PRION_1; 1.

DR PROSITE: PS00706; PRION_2; 1.
 KW Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.
 FT SIGNAL 1 24
 FT CHAIN 25 264
 FT CARBOHYD 192 192
 FT CARBOHYD 208 208
 FT DISULFID 190 225
 FT DOMAIN 54 103
 FT REPEAT 54 62
 FT REPEAT 63 70
 FT REPEAT 71 78
 FT REPEAT 79 86
 FT REPEAT 87 94
 FT REPEAT 95 103
 FT SEQUENCE 264 AA; 28644 MW; FEB73F41732619B1 CRC64;
 Query Match 93.2%; Score 41; DB 1; Length 264;
 Best Local Similarity 77.8%; Pred. No. 0.21;
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1 GXDXEDRY 9
 DB 153 GSDYEDRY 161
 RESULT 8
 PRIO ATGE STANDARD; PRT: 232 AA.
 ID PRIO ATGE STANDARD; PRT: 232 AA.
 AC P40246;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 01-NOV-1996 (Rel. 34, Last annotation update)
 DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35c) (Fragment).
 GN PNP.
 OS Ateles geoffroyi (Black-handed spider monkey).
 CC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Ateles.
 NC NCBI_TaxID=9509;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC MEDLINE=95139066; Pubmed=7837269;
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
 RL J. Mol. Biol. 245:362-374(1995).
 CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.
 CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED "RODS".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU, CRETZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE), TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
 CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.
 CC This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See <http://www.isb-sib.ch/announce/> or send an email to license@isb-sib.ch).
 CC EMBL: U08309; AAC50097.1; -
 DR HSSP: P04156; IEIG.
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; Prion; 1.
 DR SMART: SM00157; PRP; 1.
 DR PROSITE: PS00706; PRION_2; 1.
 KW Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.

```

FT  NON_TER 1 1
FT  SIGNAL <1 15
FT  CHAIN 16 214
FT  PROPEP 215 >232
FT  LIPID 214 214
FT  DISULFID 163 198
FT  CARBOHYD 165 165
FT  CARBOHYD 181 181
FT  DOMAIN 44 84
FT  REPEAT 44 51
FT  REPEAT 52 59
FT  REPEAT 60 67
FT  REPEAT 68 75
FT  NON_TER 232 232
SQ  SEQUENCE 232 AA; 25596 MW; 0E2D75F04C05CC4A CRC64;

Query Match
Best Local Similarity 90.9%; Score 40; DB 1; Length 232;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GDXEDRY 9
DB 126 GNDYEDRY 134

RESULT 9
PRIO_CERAT STANDARD; PRT; 238 AA.
AC 095145; 095200;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN PRNP.
OS Cercopithecus aethiops, and
OS Macaca sylvanus (Barbary ape).
OC Eukaryota; Metazoa; Chordata; Craniala; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
OX NCBI_Taxid=36222, 9546;
RN [1]
RP SEQUENCE FROM N.A.
RA der Kuyt A.C., Dekker J.T., Goudsmit J.;
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE
CC HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.
CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED
CC "RODS".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STAUSLER SYNDROME
CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.
CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).
CC -----
CC EMBL: U75384; AAB50623.1; -
CC EMBL: U75383; AAB50623.1; -
CC HSSP: P04925; IAG2.
CC InterPro: IPR000817; Prion.
CC Pfam: PF00377; Prion; 1.
CC SMART: SM00157; PrP; 1.
CC PROSITE: PS00706; PRION_2; 1.
CC PROSITE: PS00706; PRION_2; 1.

```

```

KM  prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.
FT  NON_TER 1 1
FT  SIGNAL <1 15
FT  CHAIN 16 215
FT  PROPEP 216 238
FT  LIPID 215 215
FT  DISULFID 164 199
FT  CARBOHYD 166 166
FT  CARBOHYD 182 182
FT  DOMAIN 44 76
FT  REPEAT 44 52
FT  REPEAT 53 60
FT  REPEAT 61 68
FT  REPEAT 69 76
FT  NON_TER 238 AA; 26123 MW; 5F59A3EBC3E3531B CRC64;

Query Match
Best Local Similarity 90.9%; Score 40; DB 1; Length 238;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GDXEDRY 9
DB 127 GNDYEDRY 135

RESULT 10
PRIO_THEGE STANDARD; PRT; 238 AA.
AC 095270;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 01-NOV-1997 (Rel. 35, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN PRNP OR PRP.
OS Theropithecus gelada (Gelada baboon).
OC Eukaryota; Metazoa; Chordata; Craniala; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Theropithecus.
OX NCBI_Taxid=9565;
RN [1]
RP SEQUENCE FROM N.A.
RA der Kuyt A.C., Dekker J.T., Goudsmit J.;
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE
CC HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.
CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED
CC "RODS".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STAUSLER SYNDROME
CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.
CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).
CC -----
CC EMBL: U75383; AAB50630.1; -
CC HSSP: P04925; IAG2.
CC InterPro: IPR000817; Prion.
CC Pfam: PF00377; Prion; 1.
CC SMART: SM00157; PrP; 1.
CC PROSITE: PS00706; PRION_1; 1.
CC PROSITE: PS00706; PRION_2; 1.
CC Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.
FT  NON_TER 1 1

```

FT SIGNAL <1 15 BY SIMILARITY.
 FT CHAIN 16 >238 MAJOR PRION PROTEIN.
 FT DISULFID 164 199 BY SIMILARITY.
 FT CARBOHYD 166 199 N-LINKED (GLCNAC. . .) (POTENTIAL).
 FT CARBOHYD 182 182 N-LINKED (GLCNAC. . .) (POTENTIAL).
 FT DOMAIN 44 83 4 X 8 AA TANDEM REPEATS OF P-H-G-G-W-G-
 FT REPEAT 44 52 0.
 FT REPEAT 53 60 1.
 FT REPEAT 61 68 2.
 FT REPEAT 69 76 3.
 FT NON_TER 238 238 4.
 SQ SEQUENCE 238 AA: 26104 MW: 5F59BFE602243EDB CRC64;
 Query Match 90.9%; Score 40; DB 1; Length 238;
 Best Local Similarity 77.8%; Pred. No. 0.3;
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 OY 1 GNDXEDRY 9
 DB 127 GNDYEDRY 135

RESULT 11

PRIO_AOTTR STANDARD; PRT; 239 AA.
 ID PRIO_AOTTR
 AC P40245;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 01-NOV-1995 (Rel. 32, Last annotation update)
 DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).
 GN PRNP.
 OS Aotus trivirgatus (Night monkey) (Douroucouli).
 OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Aotinae; Aotus.
 OX NCBI_TaxID=9505;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=95139066; PubMed=7837269;
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
 RT "Prion protein gene variation among primates.";
 RL J. Mol. Biol. 245:362-374(1995).
 CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE
 CC HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.
 CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED
 CC "RODS".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
 CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
 CC CRUZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME
 CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
 CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.
 CC This SWISS-PROT entry is copyright. It is produced through a collaboration
 CC between the Swiss Institute of Bioinformatics and the EMBL outstation
 CC the European Bioinformatics Institute. There are no restrictions on its
 CC use by non-profit institutions as long as its content is in no way
 CC modified and this statement is not removed. Usage by and for commercial
 CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
 CC or send an email to license@isb-sib.ch).
 CC EMBL; U08393; AAC50082.1; -
 DR HSSP; P04925; IAG2.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; prion; 1.
 DR SMART; SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 KW Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.
 FT NON_TER 1 1
 FT SIGNAL <1 15 BY SIMILARITY.
 FT CHAIN 16 >239 MAJOR PRION PROTEIN.

FT DISULFID 171 206 BY SIMILARITY.
 FT CARBOHYD 173 173 N-LINKED (GLCNAC. . .) (POTENTIAL).
 FT CARBOHYD 189 189 N-LINKED (GLCNAC. . .) (POTENTIAL).
 FT DOMAIN 44 83 5 X 8 AA TANDEM REPEATS OF P-H-G-G-W-G-
 FT REPEAT 44 51 0.
 FT REPEAT 52 59 1.
 FT REPEAT 60 67 2.
 FT REPEAT 68 75 3.
 FT REPEAT 76 83 4.
 FT NON_TER 239 239 5.
 SQ SEQUENCE 239 AA: 26246 MW: 2EEB77E354B7024A CRC64;
 Query Match 90.9%; Score 40; DB 1; Length 239;
 Best Local Similarity 77.8%; Pred. No. 0.3;
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 OY 1 GNDXEDRY 9
 DB 134 GNDYEDRY 142

RESULT 12

PRIO_CALMO STANDARD; PRT; 241 AA.
 ID PRIO_CALMO
 AC P40248;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 01-NOV-1995 (Rel. 32, Last annotation update)
 DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).
 GN PRNP.
 OS Callitriche moloch (Dusky titl).
 OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Callitricinae;
 OC Callitriche.
 OX NCBI_TaxID=9523;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=95139066; PubMed=7837269;
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
 RT "Prion protein gene variation among primates.";
 RL J. Mol. Biol. 245:362-374(1995).
 CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE
 CC HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.
 CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED
 CC "RODS".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
 CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
 CC CRUZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME
 CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
 CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.
 CC This SWISS-PROT entry is copyright. It is produced through a collaboration
 CC between the Swiss Institute of Bioinformatics and the EMBL outstation
 CC the European Bioinformatics Institute. There are no restrictions on its
 CC use by non-profit institutions as long as its content is in no way
 CC modified and this statement is not removed. Usage by and for commercial
 CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
 CC or send an email to license@isb-sib.ch).
 CC EMBL; U08312; AAC50100.1; -
 DR HSSP; P04925; IAG2.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; prion; 1.
 DR SMART; SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 KW Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.
 FT NON_TER 1 1
 FT SIGNAL <1 15 BY SIMILARITY.
 FT CHAIN 16 >241 MAJOR PRION PROTEIN.

```

FT DISULFID 172 207 BY SIMILARITY.
FT CARBOHYD 174 174 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 190 190 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT DOMAIN 44 84 5 X 8 AA TANDEM REPEATS OF P-H-G-G-W-G-
FT REPEAT 44 52 0.
FT REPEAT 53 60 1.
FT REPEAT 61 68 2.
FT REPEAT 69 76 3.
FT REPEAT 77 84 4.
FT NON_TER 241 241 5.
SQ SEQUENCE 241 AA; 26373 MW; C6D2013BE7CAEC93 CRC64;

Query Match
Best Local Similarity 90.9%; Score 40; DB 1; Length 241;
Matches 7; Conservative 77.8%; Pred. No. 0.3;
Mismatch 0; Indels 2; Gaps 0;

```

OY 1 GNDYEDRY 9
Db 135 GNDYEDRY 143

RESULT 13

PRIO_MANSP STANDARD; PRT; 241 AA.

ID PRIO_MANSP

AC P40255; 01-FEB-1995 (Rel. 31, Created)

DT 01-FEB-1995 (Rel. 31, Last sequence update)

DT 01-OCT-1996 (Rel. 34, Last annotation update)

DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).

GN PRNP.

OS Mandrilus sphinx (Mandrill) (Papio sphinx).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;

OC Cercopithecoidea; Mandrilus.

OX NCBI_Taxid=9561;

RN [1]

RP SEQUENCE FROM N.A.

RX MEDLINE=95139066; PubMed=7837269;

RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;

RT "Prion protein gene variation among primates.";

RL J. Mol. Biol. 245:362-374(1995).

CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE

CC HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.

CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED

CC "RODS".

CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.

CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND

CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,

CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME

CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),

CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.

CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.

CC This SWISS-PROT entry is copyright. It is produced through a collaboration

CC between the Swiss Institute of Bioinformatics and the EMBL Outstation -

CC the European Bioinformatics Institute. There are no restrictions on its

CC use by non-profit institutions as long as its content is in no way

CC modified and this statement is not removed. Usage by and for commercial

CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>

CC or send an email to license@isb-sib.ch).

CC -----

CC EMBL: U08303; AAC50091.1; -

CC HSSP: P04925; IAG2.

CC InterPro: IPR000817; Prion.

CC Pfam: PF00377; prion.1.

CC PROSITE: PS00291; prion_1; 1.

CC PROSITE: PS00706; prion_2; 1.

CC Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.

CC NON_TER 1 15 BY SIMILARITY.

CC SIGNAL 16 223 MAJOR PRION PROTEIN.

CC CHAIN 16 223

```

FT PROPEP 224 >241 REMOVED IN MATURE FORM (BY SIMILARITY).
FT LIPID 223 223 GPI-ANCHOR (BY SIMILARITY).
FT DISULFID 172 207 BY SIMILARITY.
FT CARBOHYD 174 174 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 190 190 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT DOMAIN 44 84 5 X 8 AA TANDEM REPEATS OF P-H-G-G-W-G-
FT REPEAT 44 52 0.
FT REPEAT 53 60 1.
FT REPEAT 61 68 2.
FT REPEAT 69 76 3.
FT REPEAT 77 84 4.
FT NON_TER 241 241 5.
SQ SEQUENCE 241 AA; 26398 MW; E539D84E2B59DE CRC64;

Query Match
Best Local Similarity 90.9%; Score 40; DB 1; Length 241;
Matches 7; Conservative 77.8%; Pred. No. 0.3;
Mismatch 0; Indels 2; Gaps 0;

```

OY 1 GNDYEDRY 9
Db 135 GNDYEDRY 143

RESULT 14

PRIO_CERAE STANDARD; PRT; 245 AA.

ID PRIO_CERAE

AC P40250; 01-FEB-1995 (Rel. 31, Created)

DT 01-FEB-1995 (Rel. 31, Last sequence update)

DT 16-OCT-2001 (Rel. 40, Last annotation update)

DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).

GN PRNP.

OS Cercopithecus aethiops (Green monkey) (Grivet), and

OS Cercopithecus diana (Diana monkey).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;

OC Cercopithecoidea; Cercopithecus.

OX NCBI_Taxid=9534, 36224;

RN [1]

RP SEQUENCE FROM N.A.

RX MEDLINE=95139066; PubMed=7837269;

RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;

RT "Prion protein gene variation among primates.";

RL J. Mol. Biol. 245:362-374(1995).

CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE

CC HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.

CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED

CC "RODS".

CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.

CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND

CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,

CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME

CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),

CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.

CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.

CC This SWISS-PROT entry is copyright. It is produced through a collaboration

CC between the Swiss Institute of Bioinformatics and the EMBL Outstation -

CC the European Bioinformatics Institute. There are no restrictions on its

CC use by non-profit institutions as long as its content is in no way

CC modified and this statement is not removed. Usage by and for commercial

CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>

CC or send an email to license@isb-sib.ch).

CC -----

CC EMBL: U08291; AAC50080.1; -

CC HSSP: P04925; IAG2.

CC InterPro: IPR000817; Prion.

CC Pfam: PF00377; prion.1.

CC PRINTS: PR00341; PRION.

CC SMART: SM00157; prp.1.

CC PROSITE: PS00291; prion_1; 1.

DR PROSITE: PS00706; PRION_2; 1.
 KW Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.
 FT SIGNAL 1 22
 FT CHAIN 23 222
 FT PROPEP 223 222
 FT LIPID 222 222
 FT DISULFID 171 206
 FT CARBOHYD 173 173
 FT CARBOHYD 189 189
 FT DOMAIN 51 83
 FT REPEAT 51 59
 FT REPEAT 60 67
 FT REPEAT 68 75
 FT REPEAT 76 83
 SQ SEQUENCE 245 AA; 26885 MW; D582B5BE2726C99A CRC64;
 Query Match 90.9%; Score 40; DB 1; Length 245;
 Best Local Similarity 77.8%; Pred. No. 0.31;
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1 GDXEDRY 9
 Db 134 GNDYEDRY 142

RESULT 15
 ID PRIO_CERMO STANDARD: PRT: 246 AA.
 -AC 095172; 095173;
 DT 01-NOV-1997 (Rel. 35, Created)
 DT 01-NOV-1997 (Rel. 35, Last sequence update)
 DT 15-JUL-1998 (Rel. 36, Last annotation update)
 DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
 GN PRNP.
 OS Cercopithecus mona, and
 OS Cercopithecus neglectus.
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecinae; Cercopithecus.
 OX NCBI_TaxID=36226, 36227;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA der Kuyt A.C., Dekker J.T., Goudsmit J.;
 RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE
 CC HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.
 CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED
 CC "RODS".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
 CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
 CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME
 CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
 CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.
 CC
 CC This SWISS-PROT entry is copyright. It is produced through a collaboration
 CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
 CC the European Bioinformatics Institute. There are no restrictions on its
 CC use by non-profit institutions as long as its content is in no way
 CC modified and this statement is not removed. Usage by and for commercial
 CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
 CC or send an email to license@isb-sib.ch).
 CC
 CC EMBL: U75386; AAB50625.1; -
 CC EMBL: U75387; AAB50626.1; -
 CC HSSP: P04925; IAG2.
 CC InterPro: IPR000817; Prion.
 CC Pfam: PF00377; prion.1.
 CC SMART: SM00157; PRP.1.
 CC PROSITE: PS00291; PRION_1; 1.
 CC PROSITE: PS00706; PRION_2; 1.

KW Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.
 FT NON_TER 1 1
 FT SIGNAL <1 15
 FT CHAIN 16 223
 FT PROPEP 224 246
 FT LIPID 223 223
 FT DISULFID 172 207
 FT CARBOHYD 174 174
 FT CARBOHYD 190 190
 FT DOMAIN 44 84
 FT REPEAT 44 52
 FT REPEAT 53 60
 FT REPEAT 61 68
 FT REPEAT 69 76
 FT REPEAT 77 84
 SQ SEQUENCE 246 AA; 26900 MW; 835D147CA2B4FDD3 CRC64;
 Query Match 90.9%; Score 40; DB 1; Length 246;
 Best Local Similarity 77.8%; Pred. No. 0.31;
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1 GDXEDRY 9
 Db 135 GNDYEDRY 143

Search completed: March 24, 2003, 17:20:17
 Job time : 6.4375 secs

Db 98 GSDYEDRY 106

RESULT 2

097911 PRELIMINARY: PRT: 181 AA.
AC 097911;
DT 01-MAY-1999 (TREMBLrel. 10, Created)
DT 01-MAY-1999 (TREMBLrel. 10, Last sequence update)
DE 01-JUN-2002 (TREMBLrel. 21, Last annotation update)
GN Prion protein (Fragment).

OS Budorcas taxicolor (taklin)
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovidae; Caprinae; Budorcas.
OX NCBI_TaxID=37181;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=PBL;

RA MEDLINE=99303687; PubMed=10373359;
RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
RA Schwarz T.F., Werner T., Schatzl H.M.;
RT Analysis of 27 mammalian and 9 avian PRPs reveals high conservation
of flexible regions of the prion protein."
RL J. Mol. Biol. 289:1163-1178(1999).
DR EMBL: AF117326; AAD19997.1; --
DR HSP: P10279; IDMY

DR InterPro: IPR002395; Kininogen.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR PRINTS: PR00334; KININOGEN.
DR PRINTS: PR00341; PRION.
DR SMART: SM00157; PRP; 1.
DR PROSITE: PS00291; PRION_1; 1.
DR NON_TER 1
FT NON_TER 181
FT SEQUENCE 181 AA; 19253 MW; A9001D086442E92A CRC64;

Query Match

Best Local Similarity 93.2%; Score 41; DB 6; Length 181;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GSDYEDRY 9
Db 118 GSDYEDRY 126

RESULT 3

097912 PRELIMINARY: PRT: 200 AA.
AC 097912;
DT 01-MAY-1999 (TREMBLrel. 10, Created)
DT 01-MAY-1999 (TREMBLrel. 10, Last sequence update)
DE 01-JUN-2002 (TREMBLrel. 21, Last annotation update)
GN Prion protein (Fragment).

OS Bison bonasus (European bison).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovidae; Bovinae; Bison.
OX NCBI_TaxID=9902;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=PBL;

RA MEDLINE=99303687; PubMed=10373359;
RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
RA Schwarz T.F., Werner T., Schatzl H.M.;
RT Analysis of 27 mammalian and 9 avian PRPs reveals high conservation
of flexible regions of the prion protein."
RL J. Mol. Biol. 289:1163-1178(1999).
DR EMBL: AF117328; AAD19999.1; --

DR HSP: P10279; IDMY.
DR InterPro: IPR002395; Kininogen.
DR InterPro: IPR001610; PAC.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR PRINTS: PR00334; KININOGEN.
DR PRINTS: PR00341; PRION.
DR SMART: SM00086; PAC; 1.
DR SMART: SM00157; PRP; 1.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
DR NON_TER 1
FT NON_TER 200
FT SEQUENCE 200 AA; 21674 MW; 1F270CDF4BE5271B CRC64;

Query Match 93.2%; Score 41; DB 6; Length 200;
Best Local Similarity 77.8%; Pred. No. 0.94;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GSDYEDRY 9
Db 110 GSDYEDRY 118

RESULT 4

097904 PRELIMINARY: PRT: 215 AA.
AC 097904;
DT 01-MAY-1999 (TREMBLrel. 10, Created)
DT 01-MAY-1999 (TREMBLrel. 10, Last sequence update)
DE 01-JUN-2002 (TREMBLrel. 21, Last annotation update)
GN Prion protein (Fragment).

OS Bos javanicus (Wild banteng).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovidae; Bovinae; Bos.
OX NCBI_TaxID=9906;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=PBL;

RA MEDLINE=99303687; PubMed=10373359;
RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
RA Schwarz T.F., Werner T., Schatzl H.M.;
RT Analysis of 27 mammalian and 9 avian PRPs reveals high conservation
of flexible regions of the prion protein."
RL J. Mol. Biol. 289:1163-1178(1999).
DR EMBL: AF117310; AAD19981.1; --
DR HSP: P10279; IDMY

DR InterPro: IPR002395; Kininogen.
DR InterPro: IPR001610; PAC.
DR InterPro: IPR000817; Prion.
DR Pfam: PF00377; Prion; 1.
DR PRINTS: PR00334; KININOGEN.
DR PRINTS: PR00341; PRION.
DR SMART: SM00086; PAC; 1.
DR SMART: SM00157; PRP; 1.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
DR NON_TER 1
FT NON_TER 215
FT SEQUENCE 215 AA; 23182 MW; 97A36721B1E73AB6 CRC64;

Query Match 93.2%; Score 41; DB 6; Length 215;
Best Local Similarity 77.8%; Pred. No. 1;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GSDYEDRY 9
Db 118 GSDYEDRY 126

RESULT 5

P78446 PRELIMINARY; PRT; 233 AA.
 ID P78446
 AC P78446
 DT 01-MAY-1997 (TREMBlrel. 03, Created)
 DT 01-MAY-1997 (TREMBlrel. 03, Last sequence update)
 DT 01-JUN-2002 (TREMBlrel. 21, Last annotation update)
 DE Prion protein (Fragment).
 GN PRNP.
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.
 NCBI_TaxID=9606;
 RX MEDLINE=93250789; PubMed=1363802;
 RA Diederich J.F., Knopman D.S., List J.F., Olson K., Frey W.H.,
 RA Emory C.R., Sung J.H., Haase A.T.;
 RT "Deletion in the prion protein gene in a demented patient.";
 RL Hum. Mol. Genet. 1:443-444(1992).
 (2)
 RP SEQUENCE OF 77-84 FROM N.A.
 RX MEDLINE=92073400; PubMed=1683708;
 RA Goldfarb L.G., Brown P., McCombie W.R., Goldgaber D., Swergold G.D.,
 RA Wills P.R., Cervenakova L., Baron H., Gibbs C.J., Gajdusek D.C.;
 RT "Transmissible familial Creutzfeldt-Jakob disease associated with
 RT five, seven, and eight extra octapeptide coding repeats in the PRNP
 RT gene.";
 RL Proc. Natl. Acad. Sci. U.S.A. 88:10926-10930(1991).
 DR EMBL: S71208; AAB20521.1; -
 DR EMBL: M81930; AAB59443.1; -
 DR EMBL: S71212; AAB20523.1; -
 DR EMBL: S71210; AAB20522.1; -
 DR HSSP: P04156; 10LZ.
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; prion.1.
 DR PRINTS: PR00341; PRION.
 DR SMART: SM00157; PRP.1.
 DR PROSITE: PS00291; PRION_1; 1.
 DR PROSITE: PS00706; PRION_2; 1.
 KW Prion.
 FT VARIANT 141 141 R -> C.
 FT NON_TER 233 233
 SQ SEQUENCE 233 AA; 25442 MW; 6891BD75B319C886 CRC64;
 Query Match 93.2%; Score 41; DB 4; Length 233;
 Best Local Similarity 77.8%; Pred. No. 1.1;
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1 GXDXEDRY 9
 DB 135 GSDYEDRY 143
 RESULT 6
 ID 015216 PRELIMINARY; PRT; 245 AA.
 AC 015216; 015221;
 DT 01-NOV-1996 (TREMBlrel. 01, Created)
 DT 01-NOV-1996 (TREMBlrel. 01, Last sequence update)
 DT 01-JUN-2002 (TREMBlrel. 21, Last annotation update)
 DE Prion protein.
 GN PRP OR PRNP.
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.
 NCBI_TaxID=9606;
 RX MEDLINE=91328137; PubMed=1678248;
 RA Puckett C., Concannon P., Casey C., Hood L.;
 RT "Genomic structure of the human prion protein gene.";

RL Am. J. Hum. Genet. 49:320-329(1991).
 RN (2)
 RP SEQUENCE FROM N.A.
 RA Lee I.Y., Westaway D., Smit A.F., Wang K., Cooper C., Yao H.,
 RA Prusiner S.B., Hood L.;
 RL Submitted (FEB-1998) to the EMBL/Genbank/DBJ databases.
 RN (3)
 RP SEQUENCE OF 9-232 FROM N.A.
 RX MEDLINE=93250789; PubMed=1363802;
 RA Diederich J.F., Knopman D.S., List J.F., Olson K., Frey W.H.,
 RA Emory C.R., Sung J.H., Haase A.T.;
 RT "Deletion in the prion protein gene in a demented patient.";
 RL Hum. Mol. Genet. 1:443-444(1992).
 (4)
 RP SEQUENCE OF 41-85 FROM N.A.
 RX MEDLINE=96090306; PubMed=7485229;
 RA Perry R.T., Go R.C., Hartell L.E., Acton R.T.;
 RT "SSCP analysis and sequencing of the human prion protein gene (PRNP)
 RT detects two different 24 bp deletions in an atypical Alzheimer's
 RT disease family.";
 RL Am. J. Med. Genet. 60:12-18(1995).
 DR EMBL: X83416; CAA58442.1; -
 DR EMBL: U29185; AAC78725.1; -
 DR EMBL: M81929; AAB59442.1; -
 DR EMBL: S80743; AAB50649.2; -
 DR EMBL: S80732; AAB50648.2; -
 DR HSSP: P04156; 10LZ.
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; prion.1.
 DR PRINTS: PR00341; PRION.
 DR SMART: SM00157; PRP.1.
 DR PROSITE: PS00291; PRION_1; 1.
 DR PROSITE: PS00706; PRION_2; 1.
 KW Prion.
 SQ SEQUENCE 245 AA; 26884 MW; 6BF26E0FA3F061AD CRC64;
 Query Match 93.2%; Score 41; DB 4; Length 245;
 Best Local Similarity 77.8%; Pred. No. 1.2;
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
 QY 1 GXDXEDRY 9
 DB 134 GSDYEDRY 142
 RESULT 7
 ID 060489 PRELIMINARY; PRT; 246 AA.
 AC 060489
 DT 01-AUG-1998 (TREMBlrel. 07, Created)
 DT 01-AUG-1998 (TREMBlrel. 07, Last sequence update)
 DT 01-JUN-2002 (TREMBlrel. 21, Last annotation update)
 DE Prion protein variant (Fragment).
 GN PRNP.
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.
 NCBI_TaxID=9606;
 RX MEDLINE=98044028; PubMed=9384372;
 RA Samala H.B., Mari J.J., Vallada H.P., Moura R.P., Simpson A.J.,
 RA Brentani R.R.;
 RT "A prion-linked psychiatric disorder.";
 RL Nature 390:241-241(1997).
 DR EMBL: AF030575; AAC05365.1; -
 DR HSSP: P04156; 10LZ.
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; prion.1.
 DR PRINTS: PR00341; PRION.
 DR SMART: SM00157; PRP.1.
 DR PROSITE: PS00291; PRION_1; 1.

DR PROSITE: PS00706; PRION_2; 1.
 FT NON_TER 1
 SQ SEQUENCE 246 AA; 26826 MW; 1D9B122EA7D1C18C CRC64;
 Query Match
 Best Local Similarity 93.2%; Score 41; DB 4; Length 246;
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GDXEDRY 9
 Db 135 GSDYEDRY 143

RESULT 8
 O9UP19 PRELIMINARY; PRT; 253 AA.
 AC O9UP19;
 DT 01-MAY-2000 (TREMBLrel. 13, Created)
 DT 01-MAY-2000 (TREMBLrel. 13, Last sequence update)
 DE P10N protein.
 GN PRNP.
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.
 NC NCB1_TaxID=9606;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Blood;
 RX MEDLINE=20049886; PubMed=10581485;
 RA Glibbs C.J. Jr., Brown P., Hallett M., Goldfarb L.G.;
 RA "Novel PRNP sequence variant associated with familial
 RT encephalopathy";
 RL Am. J. Med. Genet. 88:653-656(1999).
 DR EMBL: AF076976; AADA6098.1; -
 DR HSSP: P04156; 10LZ.
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; Prion; 1.
 DR SMART: SM00157; PRP; 1.
 DR PROSITE: PS00706; PRION_2; 1.
 FT VARIANT 187 187 R -> H.
 SQ SEQUENCE 253 AA; 27648 MW; 43DB58CE45E38A64 CRC64;

Query Match
 Best Local Similarity 93.2%; Score 41; DB 4; Length 253;
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GDXEDRY 9
 Db 142 GSDYEDRY 150

RESULT 9
 O96E70 PRELIMINARY; PRT; 253 AA.
 AC O96E70;
 DT 01-DEC-2001 (TREMBLrel. 19, Created)
 DT 01-DEC-2001 (TREMBLrel. 19, Last sequence update)
 DE Similar to prion protein (p27-30) (Creutzfeldt-Jakob disease,
 DE Gerstmann-Strausler-Scheinker syndrome, fatal familial insomnia).
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.
 NC NCB1_TaxID=9606;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Ovary;
 RA Strausberg R.;
 RL Submitted (Aug-2001) to the EMBL/GenBank/DBJ databases.

DR EMBL: BC012844; AAH12844.1; -
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; Prion; 1.
 DR PROSITE: PS00291; PRION_1; UNKNOWN_1.
 DR PROSITE: PS00706; PRION_2; UNKNOWN_1.
 KW Prion.
 SQ SEQUENCE 253 AA; 27629 MW; 43DB4D3BA5F67F84 CRC64;

Query Match
 Best Local Similarity 93.2%; Score 41; DB 4; Length 253;
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GDXEDRY 9
 Db 142 GSDYEDRY 150

RESULT 10
 O8TBG0 PRELIMINARY; PRT; 253 AA.
 AC O8TBG0;
 DT 01-JUN-2002 (TREMBLrel. 21, Created)
 DT 01-JUN-2002 (TREMBLrel. 21, Last sequence update)
 DE Hypothetical 27.6 kDa protein.
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.
 NC NCB1_TaxID=9606;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC TISSUE=Brain;
 RA Strausberg R.;
 RL Submitted (Feb-2002) to the EMBL/GenBank/DBJ databases.
 DR EMBL: BC022532; AAH22532.1; -
 KW Hypothetical protein.
 SQ SEQUENCE 253 AA; 27629 MW; 43DB569A1F67F84 CRC64;

Query Match
 Best Local Similarity 93.2%; Score 41; DB 4; Length 253;
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GDXEDRY 9
 Db 142 GSDYEDRY 150

RESULT 11
 O95M08 PRELIMINARY; PRT; 256 AA.
 AC O95M08;
 DT 01-DEC-2001 (TREMBLrel. 19, Created)
 DT 01-DEC-2001 (TREMBLrel. 19, Last sequence update)
 DT 01-MAR-2002 (TREMBLrel. 20, Last annotation update)
 DE Prion protein.
 GN PRNP.
 OS Budorcas taxicolor (taklin).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
 OC Bovidae; Caprinae; Budorcas.
 NC NCB1_TaxID=37181;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA Seo S., Hara K., Kubosaki A., Nasu Y., Nishimura T., Saeki K.,
 RA Matsuno Y., Endo H., Onodera T.;
 RT "Comparative analysis of the prion protein ORF nucleotide sequences
 RT from two wild ruminants, mouflon and golden taklin";
 RL Submitted (Apr-2001) to the EMBL/GenBank/DBJ databases.
 DR EMBL: AB060290; BAB69957.1; -
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; Prion; 1.
 DR PROSITE: PS00291; PRION_1; UNKNOWN_1.
 DR PROSITE: PS00706; PRION_2; UNKNOWN_1.

DE Prion protein (Fragment).
GN PRP.
OS Addax nasomaculatus.
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovidae; Hippotraginae; Addax.
OX NCBI_TaxID=59515;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=PBL;
RX MEDLINE-99303687; PubMed-10373359;
RA Wopfner F., Weidenhofer G., Schneider R., von Bruhn A., Gilch S.,
RA Schwarz T.F., Werner T., Schatzl H.M.;
RT "Analysis of 27 mammalian and 9 avian PRPs reveals high conservation
of flexible regions of the prion protein.";
RL J. Mol. Biol. 289:1163-1178(1999).
DR EMBL; AF117309; AAD19980.1; -.
DR HSSP; P10279; IDWY.
DR InterPro; IPR002395; Kininogen.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion; 1.
DR PRINTS; PRO0334; KININOGEN.
DR PRINTS; PRO0341; PRION.
DR SMART; SM00157; PRP; 1.
DR PROSITE; PS00291; PRION_1; 1.
DR PROSITE; PS00706; PRION_2; 1.
FT NON_TER 1
FT 195
SO SEQUENCE 195 AA; 21321 MW; 6A9BA6A7E1AFECAC9 CRC64;

Query Match 90.9%; Score 40; DB 6; Length 195;
Best Local Similarity 77.8%; Pred. No. 1.5;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GDXEDRY 9
| | | | | | | | | |
Db 109 GNDYEDRY 117

Search completed: March 24, 2003, 17:22:11
Job time : 20.6875 secs

GenCore version 5.1.4_p5_4578
Copyright (c) 1993 - 2003 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: March 24, 2003, 17:20:26 ; Search time 8.625 Seconds

(without alignments)
30.702 Million cell updates/sec

Title: US-09-508-828b-1

Perfect score: 44

Sequence: 1 GDXEDRY 9

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 262574 seqs, 29422922 residues

Total number of hits satisfying chosen parameters: 262574

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

1: /cgn2_6/prodata/2/1aa/5A.COMB.pep.*
2: /cgn2_6/prodata/2/1aa/5B.COMB.pep.*
3: /cgn2_6/prodata/2/1aa/6A.COMB.pep.*
4: /cgn2_6/prodata/2/1aa/6B.COMB.pep.*
5: /cgn2_6/prodata/2/1aa/PCTUS.COMB.pep.*
6: /cgn2_6/prodata/2/1aa/backfile1.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	41	93.2	21	1	US-08-244-701B-43
2	41	93.2	21	1	US-09-076-721-43
3	41	93.2	25	1	US-08-244-701B-10
4	41	93.2	25	1	US-08-244-701B-12
5	41	93.2	25	4	US-09-076-721-10
6	41	93.2	25	4	US-09-076-721-12
7	41	93.2	26	1	US-08-244-701B-41
8	41	93.2	26	4	US-09-076-721-41
9	41	93.2	31	1	US-08-244-701B-7
10	41	93.2	31	1	US-08-244-701B-9
11	41	93.2	31	4	US-09-076-721-7
12	41	93.2	31	4	US-09-076-721-9
13	41	93.2	142	1	US-08-556-823-10
14	41	93.2	253	1	US-08-242-188-2
15	41	93.2	253	1	US-08-509-261A-2
16	41	93.2	253	1	US-08-660-626-8
17	41	93.2	253	1	US-08-692-892-2
18	41	93.2	253	2	US-08-713-939A-2
19	41	93.2	253	2	US-08-868-162A-22
20	41	93.2	253	4	US-09-031-168-8
21	41	93.2	253	4	US-09-128-450-20
22	41	93.2	253	4	US-09-036-579-2
23	41	93.2	253	4	US-09-823-494-20
24	41	93.2	253	4	US-09-550-374-2
25	41	93.2	253	1	US-08-242-188-3
26	41	93.2	253	1	US-08-509-261A-3
27	41	93.2	253	1	US-08-660-626-9

28	41	93.2	263	1	US-08-692-892-3	Sequence 3, Appl1
29	41	93.2	263	2	US-08-713-939A-3	Sequence 3, Appl1
30	41	93.2	263	2	US-08-868-162A-23	Sequence 23, Appl1
31	41	93.2	263	4	US-09-031-168-9	Sequence 9, Appl1
32	41	93.2	263	4	US-09-036-579-3	Sequence 3, Appl1
33	41	93.2	263	4	US-09-550-374-3	Sequence 3, Appl1
34	41	93.2	264	4	US-09-128-450-21	Sequence 21, Appl1
35	41	93.2	264	4	US-09-823-494-21	Sequence 21, Appl1
36	41	90.9	21	1	US-08-244-701B-42	Sequence 42, Appl1
37	40	90.9	21	1	US-09-076-721-42	Sequence 11, Appl1
38	40	90.9	25	1	US-08-244-701B-11	Sequence 65, Appl1
39	40	90.9	25	1	US-08-244-701B-65	Sequence 11, Appl1
40	40	90.9	25	4	US-09-076-721-11	Sequence 11, Appl1
41	40	90.9	25	4	US-09-076-721-65	Sequence 65, Appl1
42	40	90.9	31	1	US-08-244-701B-8	Sequence 8, Appl1
43	40	90.9	31	1	US-08-244-701B-53	Sequence 53, Appl1
44	40	90.9	31	4	US-09-076-721-8	Sequence 8, Appl1
45	40	90.9	31	4	US-09-076-721-53	Sequence 53, Appl1

ALIGNMENTS

RESULT 1
US-08-244-701B-43
Sequence 43, Application US/08244701B
Patent No. 5773572
GENERAL INFORMATION:
APPLICANT: Fishleigh, Robert V.
APPLICANT: Robson, Barry
APPLICANT: Mee, Roger P.
TITLE OF INVENTION: Fragments of Prion Proteins
NUMBER OF SEQUENCES: 67
CORRESPONDENCE ADDRESSES:
ADDRESSEE: Penile & Edmonds
STREET: 1155 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: U.S.A.
ZIP: 10036
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/244,701B
FILING DATE: 02-JUN-1994
CLASSIFICATION: 436
ATTORNEY/AGENT INFORMATION:
NAME: Fanucci, Allan A.
REGISTRATION NUMBER: 30,256
REFERENCE/DOCKET NUMBER: 8080-007
TELEPHONE: (212) 790-9090
TELEFAX: (212) 869-8864/9741
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 43:
SEQUENCE CHARACTERISTICS:
LENGTH: 21 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-244-701B-43

Query Match 93.2%; Score 41; DB 1; Length 21;
Best Local Similarity 77.8%; Pred. NO. 0.087;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
DB 11 GSDYEDRY 19

RESULT 2
 US-09-076-721-43
 Sequence 43, Application US/09076721
 Patent No. 6379605
 GENERAL INFORMATION:
 APPLICANT: Fishlelgh, Robert V.
 APPLICANT: Robson, Barry
 APPLICANT: Mee, Roger P.
 TITLE OF INVENTION: Fragments of Prion Proteins
 NUMBER OF SEQUENCES: 67
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Pennie & Edmonds
 STREET: 1155 Avenue of the Americas
 CITY: New York
 STATE: New York
 COUNTRY: U.S.A.
 ZIP: 10036
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patentin Release #1.0, Version #1.25
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/09/076,721
 FILING DATE:
 CLASSIFICATION:
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/244,701
 FILING DATE:
 ATTORNEY/AGENT INFORMATION:
 NAME: Fanucci, Allan A.
 REGISTRATION NUMBER: 30,256
 REFERENCE/DOCKET NUMBER: 8080-007
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (212) 790-9090
 TELEFAX: (212) 869-8864/9741
 TELEX: 66141 PENNIE
 INFORMATION FOR SEQ ID NO: 43:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 21 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 MOLECULE TYPE: peptide
 US-09-076-721-43
 Query Match 93.2%; Score 41; DB 4; Length 21;
 Best Local Similarity 77.8%; Pred. No. 0.087;
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

ZIP: 10036
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patentin Release #1.0, Version #1.25
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/244,701B
 FILING DATE: 02-JUN-1994
 CLASSIFICATION: 436
 ATTORNEY/AGENT INFORMATION:
 NAME: Fanucci, Allan A.
 REGISTRATION NUMBER: 30,256
 REFERENCE/DOCKET NUMBER: 8080-007
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (212) 790-9090
 TELEFAX: (212) 869-8864/9741
 TELEX: 66141 PENNIE
 INFORMATION FOR SEQ ID NO: 10:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 25 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 MOLECULE TYPE: peptide
 FEATURE:
 NAME/KEY: Modified-site
 LOCATION: 1
 OTHER INFORMATION: /label= X
 OTHER INFORMATION: /note= "X may be absent or present independently
 OTHER INFORMATION: of Y and denotes one or more amino acid(s)"
 FEATURE:
 NAME/KEY: Modified-site
 LOCATION: 25
 OTHER INFORMATION: /label= Y
 OTHER INFORMATION: /note= "Y may be absent or present independently
 OTHER INFORMATION: of X and denotes one or more amino acid(s)"
 US-08-244-701B-10
 Query Match 93.2%; Score 41; DB 1; Length 25;
 Best Local Similarity 77.8%; Pred. No. 0.1;
 Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GDXEDRY 9
 DB 11 GSDYEDRY 19
 RESULT 3
 US-08-244-701B-10
 Sequence 10, Application US/08244701B
 Patent No. 5773572
 GENERAL INFORMATION:
 APPLICANT: Fishlelgh, Robert V.
 APPLICANT: Robson, Barry
 APPLICANT: Mee, Roger P.
 TITLE OF INVENTION: Fragments of Prion Proteins
 NUMBER OF SEQUENCES: 67
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Pennie & Edmonds
 STREET: 1155 Avenue of the Americas
 CITY: New York
 STATE: New York
 COUNTRY: U.S.A.

RESULT 4
 US-08-244-701B-12
 Sequence 12, Application US/08244701B
 Patent No. 5773572
 GENERAL INFORMATION:
 APPLICANT: Fishlelgh, Robert V.
 APPLICANT: Robson, Barry
 APPLICANT: Mee, Roger P.
 TITLE OF INVENTION: Fragments of Prion Proteins
 NUMBER OF SEQUENCES: 67
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Pennie & Edmonds
 STREET: 1155 Avenue of the Americas
 CITY: New York
 STATE: New York
 COUNTRY: U.S.A.
 ZIP: 10036
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patentin Release #1.0, Version #1.25
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/244,701B
 FILING DATE: 02-JUN-1994

CLASSIFICATION: 436
ATTORNEY/AGENT INFORMATION:
NAME: Fanucci, Allan A.
REGISTRATION NUMBER: 30,256
REFERENCE/DOCKET NUMBER: 8080-007
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
TELEFAX: (212) 869-8864/9741
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 12:
SEQUENCE CHARACTERISTICS:
LENGTH: 25 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
FEATURE:
NAME/KEY: Modified-site
LOCATION: 1
OTHER INFORMATION: /label- X
OTHER INFORMATION: /note- "X may be absent or present independently
OTHER INFORMATION: of Y and denotes one or more amino acid(s)"
FEATURE:
NAME/KEY: Modified-site
LOCATION: 25
OTHER INFORMATION: /label- Y
OTHER INFORMATION: /note- "Y may be absent or present independently
OTHER INFORMATION: of X and denotes one or more amino acid(s)"
US-08-244-701B-12

Query Match 93.2%; Score 41; DB 1; Length 25;
Best Local Similarity 77.8%; Pred. No. 0.1;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GDXEDRYRY 9
DB 12 GSDYEDRYRY 20

RESULT 5
US-09-076-721-10
Sequence 10, Application US/09076721
Patent No. 6379905
GENERAL INFORMATION:
APPLICANT: Fishleigh, Robert V.
APPLICANT: Robson, Barry
APPLICANT: Mee, Roger P.
TITLE OF INVENTION: Fragments of Prion Proteins
NUMBER OF SEQUENCES: 67
CORRESPONDENCE ADDRESS:
ADDRESSEE: Pennie & Edmonds
STREET: 1155 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: U.S.A.
ZIP: 10036
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/076,721
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/244,701
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Fanucci, Allan A.
REGISTRATION NUMBER: 30,256
REFERENCE/DOCKET NUMBER: 8080-007
TELECOMMUNICATION INFORMATION:

TELEPHONE: (212) 790-9090
TELEFAX: (212) 869-8864/9741
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
LENGTH: 25 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
FEATURE:
NAME/KEY: Modified-site
LOCATION: 1
OTHER INFORMATION: /label- X
OTHER INFORMATION: /note- "X may be absent or present independently
OTHER INFORMATION: of Y and denotes one or more amino acid(s)"
FEATURE:
NAME/KEY: Modified-site
LOCATION: 25
OTHER INFORMATION: /label- Y
OTHER INFORMATION: /note- "Y may be absent or present independently
OTHER INFORMATION: of X and denotes one or more amino acid(s)"
US-09-076-721-10

Query Match 93.2%; Score 41; DB 4; Length 25;
Best Local Similarity 77.8%; Pred. No. 0.1;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GDXEDRYRY 9
DB 12 GSDYEDRYRY 20

RESULT 6
US-09-076-721-12
Sequence 12, Application US/09076721
Patent No. 6379905
GENERAL INFORMATION:
APPLICANT: Fishleigh, Robert V.
APPLICANT: Robson, Barry
APPLICANT: Mee, Roger P.
TITLE OF INVENTION: Fragments of Prion Proteins
NUMBER OF SEQUENCES: 67
CORRESPONDENCE ADDRESS:
ADDRESSEE: Pennie & Edmonds
STREET: 1155 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: U.S.A.
ZIP: 10036
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/076,721
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/244,701
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Fanucci, Allan A.
REGISTRATION NUMBER: 30,256
REFERENCE/DOCKET NUMBER: 8080-007
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
TELEFAX: (212) 869-8864/9741
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 12:
SEQUENCE CHARACTERISTICS:
LENGTH: 25 amino acids

TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
FEATURE:
NAME/KEY: Modified-site
LOCATION: 1
OTHER INFORMATION: /Label-X
OTHER INFORMATION: /note- "X may be absent or present independently"
OTHER INFORMATION: of Y and denotes one or more amino acid(s)"
FEATURE:
NAME/KEY: Modified-site
LOCATION: 25
OTHER INFORMATION: /Label-Y
OTHER INFORMATION: /note- "Y may be absent or present independently"
OTHER INFORMATION: of X and denotes one or more amino acid(s)"

US-09-076-721-12
Query Match 93.2%; Score 41; DB 4; Length 25;
Best Local Similarity 77.8%; Pred. No. 0.1;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1 GDXEDRY 9
DB 12 GSDYEDRY 20

RESULT 7
US-08-244-701B-41
Sequence 41, Application US/08244701B
Patent No. 5773572
GENERAL INFORMATION:
APPLICANT: Fishleigh, Robert V.
APPLICANT: Robson, Barry
APPLICANT: Mee, Roger P.
TITLE OF INVENTION: Fragments of Prion Proteins
NUMBER OF SEQUENCES: 67
CORRESPONDENCE ADDRESS:
ADDRESSEE: Pennie & Edmonds
STREET: 1155 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: U.S.A.
ZIP: 10036
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/244,701B
FILING DATE: 02-JUN-1994
CLASSIFICATION: 436
ATTORNEY/AGENT INFORMATION:
NAME: Fannucci, Allan A.
REGISTRATION NUMBER: 30,256
REFERENCE/DOCKET NUMBER: 8080-007
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
TELEFAX: (212) 869-8864/9741
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 41:
SEQUENCE CHARACTERISTICS:
LENGTH: 26 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-244-701B-41

Query Match 93.2%; Score 41; DB 1; Length 26;
Best Local Similarity 77.8%; Pred. No. 0.11;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GDXEDRY 9
DB 10 GSDYEDRY 18

RESULT 8
US-09-076-721-41
Sequence 41, Application US/09076721
Patent No. 6379905
GENERAL INFORMATION:
APPLICANT: Fishleigh, Robert V.
APPLICANT: Robson, Barry
APPLICANT: Mee, Roger P.
TITLE OF INVENTION: Fragments of Prion Proteins
NUMBER OF SEQUENCES: 67
CORRESPONDENCE ADDRESS:
ADDRESSEE: Pennie & Edmonds
STREET: 1155 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: U.S.A.
ZIP: 10036
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/076,721
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/244,701
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Fannucci, Allan A.
REGISTRATION NUMBER: 30,256
REFERENCE/DOCKET NUMBER: 8080-007
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
TELEFAX: (212) 869-8864/9741
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 41:
SEQUENCE CHARACTERISTICS:
LENGTH: 26 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-076-721-41

Query Match 93.2%; Score 41; DB 4; Length 26;
Best Local Similarity 77.8%; Pred. No. 0.11;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GDXEDRY 9
DB 10 GSDYEDRY 18

RESULT 9
US-08-244-701B-7
Sequence 7, Application US/08244701B
Patent No. 5773572
GENERAL INFORMATION:
APPLICANT: Fishleigh, Robert V.
APPLICANT: Robson, Barry
APPLICANT: Mee, Roger P.
TITLE OF INVENTION: Fragments of Prion Proteins
NUMBER OF SEQUENCES: 67
CORRESPONDENCE ADDRESS:
ADDRESSEE: Pennie & Edmonds

STREET: 1155 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: U.S.A.
ZIP: 10036
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
OPERATING SYSTEM: IBM PC compatible
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/244,701B
FILING DATE: 02-JUN-1994
CLASSIFICATION: 436
ATTORNEY/AGENT INFORMATION:
NAME: Fanucci, Allan A.
REGISTRATION NUMBER: 30,256
REFERENCE/DOCKET NUMBER: 8080-007
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
TELEFAX: (212) 869-8864/9741
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
LENGTH: 31 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
FEATURE:
NAME/KEY: Modified-site
LOCATION: 1
OTHER INFORMATION: /label- X
OTHER INFORMATION: /note- "X may be absent or present independently
OTHER INFORMATION: of Y and denotes one or more amino acid(s)"
FEATURE:
NAME/KEY: Modified-site
LOCATION: 31
OTHER INFORMATION: /label- Y
OTHER INFORMATION: /note- "Y may be absent or present independently
OTHER INFORMATION: of X and denotes one or more amino acid(s)"
US-08-244-701B-7
Query Match 93.2%; Score 41; DB 1; Length 31;
Best Local Similarity 77.8%; Pred. No. 0.13;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1 GSDYEDRY 9
Db 12 GSDYEDRY 20
RESULT 10
US-08-244-701B-9
Sequence 9, Application US/08244701B
Patent No. 5773572
GENERAL INFORMATION:
APPLICANT: Fishleigh, Robert V.
APPLICANT: Robson, Barry
TITLE OF INVENTION: Fragments of Prion Proteins
NUMBER OF SEQUENCES: 67
CORRESPONDENCE ADDRESS:
ADDRESSEE: Pennie & Edmonds
STREET: 1155 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: U.S.A.
ZIP: 10036
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
OPERATING SYSTEM: IBM PC compatible
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/244,701
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION NUMBER:
ATTORNEY/AGENT INFORMATION:

SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/244,701B
FILING DATE: 02-JUN-1994
CLASSIFICATION: 436
ATTORNEY/AGENT INFORMATION:
NAME: Fanucci, Allan A.
REGISTRATION NUMBER: 30,256
REFERENCE/DOCKET NUMBER: 8080-007
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
TELEFAX: (212) 869-8864/9741
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 9:
SEQUENCE CHARACTERISTICS:
LENGTH: 31 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
FEATURE:
NAME/KEY: Modified-site
LOCATION: 1
OTHER INFORMATION: /label- X
OTHER INFORMATION: /note- "X may be absent or present independently
OTHER INFORMATION: of Y and denotes one or more amino acid(s)"
FEATURE:
NAME/KEY: Modified-site
LOCATION: 31
OTHER INFORMATION: /label- Y
OTHER INFORMATION: /note- "Y may be absent or present independently
OTHER INFORMATION: of X and denotes one or more amino acid(s)"
US-08-244-701B-9
Query Match 93.2%; Score 41; DB 1; Length 31;
Best Local Similarity 77.8%; Pred. No. 0.13;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1 GSDYEDRY 9
Db 12 GSDYEDRY 20
RESULT 11
US-09-076-721-7
Sequence 7, Application US/09076721
Patent No. 6379905
GENERAL INFORMATION:
APPLICANT: Fishleigh, Robert V.
APPLICANT: Robson, Barry
TITLE OF INVENTION: Fragments of Prion Proteins
NUMBER OF SEQUENCES: 67
CORRESPONDENCE ADDRESS:
ADDRESSEE: Pennie & Edmonds
STREET: 1155 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: U.S.A.
ZIP: 10036
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
OPERATING SYSTEM: IBM PC compatible
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/076,721
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION NUMBER:
ATTORNEY/AGENT INFORMATION:

NAME: Fanucci, Allan A.
REGISTRATION NUMBER: 30,256
REFERENCE/DOCKET NUMBER: 8080-007
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
TELEFAX: (212) 869-8864/9741
TELEX: 66141 PENNTE
INFORMATION FOR SEQ ID NO: 7:
SEQUENCE CHARACTERISTICS:
LENGTH: 31 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
FEATURE:
NAME/KEY: Modified-site
LOCATION: 1
OTHER INFORMATION: /label=X
OTHER INFORMATION: /note="X may be absent or present independently"
OTHER INFORMATION: of Y and denotes one or more amino acid(s)"
FEATURE:
NAME/KEY: Modified-site
LOCATION: 31
OTHER INFORMATION: /label=Y
OTHER INFORMATION: /note="Y may be absent or present independently"
OTHER INFORMATION: of X and denotes one or more amino acid(s)"
US-09-076-721-9

Query Match 93.2%; Score 41; DB 4; Length 31;
Best Local Similarity 77.8%; Pred. No. 0.13;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GDXEDRY 9
DB 12 GSDYEDRY 20

RESULT 12
US-09-076-721-9
Sequence 9, Application US/09076721
Patent No. 6379905
GENERAL INFORMATION:
APPLICANT: Flashlight, Robert V.
APPLICANT: Robson, Barry
TITLE OF INVENTION: Fragments of Prion Proteins
NUMBER OF SEQUENCES: 67
CORRESPONDENCE ADDRESS:
ADDRESSEE: Pennie & Edmonds
STREET: 1155 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: U.S.A.
ZIP: 10036
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/076,721
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/244,701
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Fanucci, Allan A.
REGISTRATION NUMBER: 30,256
REFERENCE/DOCKET NUMBER: 8080-007
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
TELEFAX: (212) 869-8864/9741

TELEX: 66141 PENNTE
INFORMATION FOR SEQ ID NO: 9:
SEQUENCE CHARACTERISTICS:
LENGTH: 31 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
FEATURE:
NAME/KEY: Modified-site
LOCATION: 1
OTHER INFORMATION: /label=X
OTHER INFORMATION: /note="X may be absent or present independently"
OTHER INFORMATION: of Y and denotes one or more amino acid(s)"
FEATURE:
NAME/KEY: Modified-site
LOCATION: 31
OTHER INFORMATION: /label=Y
OTHER INFORMATION: /note="Y may be absent or present independently"
OTHER INFORMATION: of X and denotes one or more amino acid(s)"
US-09-076-721-9

Query Match 93.2%; Score 41; DB 4; Length 31;
Best Local Similarity 77.8%; Pred. No. 0.13;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GDXEDRY 9
DB 12 GSDYEDRY 20

RESULT 13
US-08-556-823-10
Sequence 10, Application US/08556823
Patent No. 5750361
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Kiyotoshi Kaneko
TITLE OF INVENTION: Formation and use of prion protein
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Asclit
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/556,823
FILING DATE:
CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: Valeta Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
LENGTH: 142 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-556-823-10

Query Match 93.2%; Score 41; DB 1; Length 142;
Best Local Similarity 77.8%; Pred. No. 0.62;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1 GDXEDRY 9
1 | 11111
Db 53 GSDYEDRY 61

RESULT 14
US-08-242-188-2
Sequence 2, Application US/08242188
Patent No. 5565186
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
APPLICANT: Scott, Michael R.
TITLE OF INVENTION: METHOD OF DETECTING PRIONS IN A SAMPLE
TITLE OF INVENTION: AND TRANSGENIC ANIMAL USED FOR SAME
NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Karl Boslicvic
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/242.188
FILING DATE: 13-MAY-1994
CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: Boslicvic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/014001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 854-5277
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO. 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
ORIGINAL SOURCE:
ORGANISM: HUMAN PRION PROTEIN, HuPrP
US-08-242-188-2
Query Match 93.2%; Score 41; DB 1; Length 253;
Best Local Similarity 77.8%; Pred. No. 1.1;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1 GDXEDRY 9
1 | 11111
Db 142 GSDYEDRY 150

NUMBER OF SEQUENCES: 4
CORRESPONDENCE ADDRESS:
ADDRESSEE: Boslicvic & Reed, LLP
STREET: 285 Hamilton Avenue, Suite 200
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94301
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASTSEQ for Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/509,261A
FILING DATE: 31-JUL-1995
CLASSIFICATION: 800
PRIOR APPLICATION DATA:
APPLICATION NUMBER:
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Boslicvic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 6510-030001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 650-327-3400
TELEFAX: 650-327-3231
INFORMATION FOR SEQ ID NO. 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
US-08-509-261A-2

Query Match 93.2%; Score 41; DB 1; Length 253;
Best Local Similarity 77.8%; Pred. No. 1.1;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1 GDXEDRY 9
1 | 11111
Db 142 GSDYEDRY 150

Search completed: March 24, 2003, 17:23:04
job time : 8.625 secs

1. The first part of the document is a list of the names of the persons who were present at the meeting. The names are listed in alphabetical order.

GenCore version 5.1.4_p5.4578
Copyright (c) 1993 - 2003 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: March 24, 2003, 17:23:11 ; Search time 8.0625 Seconds
(without alignments)
59.679 Million cell updates/sec

Title: US-09-508-828b-1
Perfect score: 44
Sequence: 1 GDXEDRY 9

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 221153 seqs, 53462247 residues

Total number of hits satisfying chosen parameters: 221153

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published_Applications_AA.*
1: /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pep.*
2: /cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep.*
3: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep.*
4: /cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep.*
5: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep.*
6: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep.*
7: /cgn2_6/ptodata/1/pubpaa/PCTUS_PUBCOMB.pep.*
8: /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pep.*
9: /cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep.*
10: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep.*
11: /cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep.*
12: /cgn2_6/ptodata/1/pubpaa/US10_PUBCOMB.pep.*
13: /cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB.pep.*
14: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length DB	ID	Description
1	41	93.2	161	10	US-09-745-003-9
2	41	93.2	162	10	US-09-745-003-10
3	41	93.2	253	10	US-09-904-987-3
4	41	93.2	253	10	US-09-919-172-57
5	41	93.2	253	10	US-09-943-906-2
6	41	93.2	256	9	US-10-109-551-2
7	41	93.2	263	10	US-09-943-906-3
8	41	93.2	161	9	US-10-209-194-2
9	40	90.9	255	10	US-09-745-003-7
10	40	90.9	255	10	US-09-943-906-4
11	40	90.9	256	9	US-10-109-551-4
12	40	90.9	256	9	US-10-109-551-6
13	40	90.9	256	9	US-10-109-551-8
14	39	88.6	163	10	US-09-745-003-11
15	39	88.6	164	10	US-09-745-003-12
16	39	88.6	254	9	US-10-106-574-5
17	39	88.6	254	9	US-10-106-574-6
18	39	88.6	254	9	US-10-106-574-7
19	39	88.6	254	9	US-10-106-574-7

20	39	88.6	254	9	US-10-106-574-8	Sequence 8, Appl1
21	39	88.6	254	10	US-09-943-906-1	Sequence 1, Appl1
22	39	88.6	439	9	US-10-115-984-2	Sequence 2, Appl1
23	33	75.0	46	9	US-09-939-780-4	Sequence 4, Appl1
24	33	75.0	46	10	US-09-147-761-4	Sequence 4, Appl1
25	33	75.0	1527	9	US-09-966-4228-9	Sequence 9, Appl1
26	30	68.2	165	10	US-09-815-242-11985	Sequence 1, Appl1
27	30	68.2	252	9	US-09-974-298-193	Sequence 4, Appl1
28	30	68.2	434	10	US-09-881-457A-4	Sequence 193, App
29	30	68.2	809	9	US-09-738-626-4944	Sequence 4944, Ap
30	30	68.2	833	9	US-10-014-436-3	Sequence 3, Appl1
31	30	68.2	979	9	US-09-884-001-4	Sequence 4, Appl1
32	30	68.2	1938	9	US-10-014-436-2	Sequence 4, Appl1
33	29	65.9	255	10	US-09-925-300-1218	Sequence 1218, Ap
34	29	65.9	315	10	US-09-912-717-3	Sequence 3, Appl1
35	29	65.9	319	9	US-10-161-418A-10	Sequence 10, Appl
36	29	65.9	319	9	US-10-161-418A-12	Sequence 12, Appl
37	29	65.9	647	9	US-10-086-464-2	Sequence 2, Appl1
38	29	65.9	647	9	US-10-086-464-4	Sequence 4, Appl1
39	29	65.9	691	10	US-09-815-242-12339	Sequence 12339, A
40	29	65.9	721	9	US-10-086-464-5	Sequence 5, Appl1
41	29	65.9	1039	10	US-09-900-237-14	Sequence 14, Appl
42	28	63.6	146	10	US-09-864-761-46804	Sequence 46804, A
43	28	63.6	268	10	US-09-765-272-140	Sequence 140, App
44	28	63.6	329	10	US-09-953-956-2	Sequence 2, Appl1
45	28	63.6	329	10	US-09-953-956-7	Sequence 7, Appl1

ALIGNMENTS

RESULT 1
US-09-745-003-9
Sequence 9, Application US/09745003
Patent No. US20020042122A1
GENERAL INFORMATION:
APPLICANT: Bazar, Fernando J
TITLE OF INVENTION: Human Proteins; Related Reagents
FILE REFERENCE: PTP2
CURRENT APPLICATION NUMBER: US/09/745,003
CURRENT FILING DATE: 2000-12-20
NUMBER OF SEQ ID NOS: 13
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 9
LENGTH: 161
TYPE: PRT
ORGANISM: bovine
US-09-745-003-9

Query Match 93.2%; Score 41; DB 10; Length 161;
Best Local Similarity 77.8%; Pred. No. 0.35;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GDXEDRY 9
DB 50 GSDYEDRY 58
US-09-745-003-10
Sequence 10, Application US/09745003
Patent No. US20020042122A1
GENERAL INFORMATION:
APPLICANT: Bazar, Fernando J
TITLE OF INVENTION: Human Proteins; Related Reagents
FILE REFERENCE: PTP2
CURRENT APPLICATION NUMBER: US/09/745,003
CURRENT FILING DATE: 2000-12-20
NUMBER OF SEQ ID NOS: 13
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 10
LENGTH: 162
TYPE: PRT

ORGANISM: primate
US-09-745-003-10

Query Match 93.2%; Score 41; DB 10; Length 162;
Best Local Similarity 77.8%; Pred. No. 0.35;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GDXEDRY 9
DB 51 GSDYEDRY 59

RESULT 3

US-09-904-987-3
Sequence 3, Application US/09904987
Patent No. US20020037908A1
GENERAL INFORMATION:
APPLICANT: NO. US20020037908A1acetyl, Inc.
TITLE OF INVENTION: Methods and Compositions for Controlling Pathological and Prepath
FILE REFERENCE: 42108/26146
CURRENT APPLICATION NUMBER: US/09/904, 987
CURRENT FILING DATE: 2001-07-12
NUMBER OF SEQ ID NOS: 7
SOFTWARE: PatentIn version 3.0
SEQ ID NO 3
LENGTH: 253
TYPE: PRT
ORGANISM: homo sapiens
PUBLICATION INFORMATION:
DATABASE ACCESSION NUMBER: NCBI ENTREZ / XM_0095567
DATABASE ENTRY DATE: 2001-04-17
RELEVANT RESIDUES: (1)..(253)
US-09-904-987-3

Query Match 93.2%; Score 41; DB 10; Length 253;
Best Local Similarity 77.8%; Pred. No. 0.56;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GDXEDRY 9
DB 142 GSDYEDRY 150

RESULT 4

US-09-919-172-57
Sequence 57, Application US/09919172
Patent No. US20020119463A1
GENERAL INFORMATION:
APPLICANT: Faris, Mary
TITLE OF INVENTION: PROSTATE CANCER MARKERS
FILE REFERENCE: PA-0036 US
CURRENT APPLICATION NUMBER: US/09/919,172
CURRENT FILING DATE: 2001-07-30
PRIORITY APPLICATION NUMBER: 60/222,469
PRIORITY FILING DATE: 2000-07-28
NUMBER OF SEQ ID NOS: 102
SOFTWARE: PERL Program
SEQ ID NO 57
LENGTH: 253
TYPE: PRT
ORGANISM: Homo sapiens
FEATURE:
NAME/KEY: misc_feature
OTHER INFORMATION: Incyte ID NO. US20020119463A1 1256895CD1
US-09-919-172-57

Query Match 93.2%; Score 41; DB 10; Length 253;
Best Local Similarity 77.8%; Pred. No. 0.56;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1 GDXEDRY 9

DB 142 GSDYEDRY 150

RESULT 5

US-09-943-906-2
Sequence 2, Application US/09943906
Patent No. US20020150571A1
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
Williamson, R. Anthony
Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/943,906
FILING DATE: 30-Aug-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/550,374
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX: <Unknown>
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-09-943-906-2

Query Match 93.2%; Score 41; DB 10; Length 253;
Best Local Similarity 77.8%; Pred. No. 0.56;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GDXEDRY 9
DB 142 GSDYEDRY 150

RESULT 6

US-10-109-551-2
Sequence 2, Application US/10109551
Publication No. US20020194635A1
GENERAL INFORMATION:
APPLICANT: DUNNE, PATRICK M.
PIEDRAHITA, JORGE
TITLE OF INVENTION: TRANSGENIC ANIMALS RESISTANT TO TRANSMISSIBLE
FILE REFERENCE: PAMK:207US
CURRENT APPLICATION NUMBER: US/10/109,551
CURRENT FILING DATE: 2002-03-28
PRIOR APPLICATION NUMBER: 60/280,549

PRIOR FILING DATE: 2001-03-30
NUMBER OF SEQ ID NOS: 10
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 2
LENGTH: 256
TYPE: PRT
ORGANISM: Bos taurus
US-10-109-551-2

Query Match 93.2% Score 41; DB 9; Length 256;
Best Local Similarity 77.8% Pred. No. 0.56;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GDXEDRY 9
| | | | |
Db 145 GSDYEDRY 153

RESULT 7
US-09-943-906-3
Sequence 3, Application US/09943906
Patent No. US20020150571A1
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
Williamson, R. Anthony
Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025

COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/943,906
FILING DATE: 30-Aug-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/550,374
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX: <Unknown>
INFORMATION FOR SEQ ID NO: 3:
SEQUENCE CHARACTERISTICS:
LENGTH: 263 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 3:
US-09-943-906-3

Query Match 93.2% Score 41; DB 10; Length 263;
Best Local Similarity 77.8% Pred. No. 0.58;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GDXEDRY 9
| | | | |
Db 152 GSDYEDRY 160

RESULT 8
US-10-209-194-2
Sequence 2, Application US/10209194
Publication No. US20030051264A1
GENERAL INFORMATION:
APPLICANT: LILJEDAHN, MONIKA
APPLICANT: ASPLAND, SIMON ERIC
TITLE OF INVENTION: GENETICALLY MODIFIED COWS HAVING REDUCED
FILE REFERENCE: BIOBANK 007A
CURRENT APPLICATION NUMBER: US/10/209,194
CURRENT FILING DATE: 2002-07-29
PRIOR APPLICATION NUMBER: 60/309,222
PRIOR FILING DATE: 2001-07-31
PRIOR APPLICATION NUMBER: 60/367,091
PRIOR FILING DATE: 2002-03-21
NUMBER OF SEQ ID NOS: 15
SOFTWARE: FastSeq for Windows Version 4.0
SEQ ID NO 2
LENGTH: 264
TYPE: PRT
ORGANISM: Bos Taurus
US-10-209-194-2

Query Match 93.2% Score 41; DB 9; Length 264;
Best Local Similarity 77.8% Pred. No. 0.58;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GDXEDRY 9
| | | | |
Db 153 GSDYEDRY 161

RESULT 9
US-09-745-003-7
Sequence 7, Application US/09745003
Patent No. US20020042122A1
GENERAL INFORMATION:
APPLICANT: Bazan, Fernando J
TITLE OF INVENTION: Human Proteins; Related Reagents
FILE REFERENCE: PrP2
CURRENT APPLICATION NUMBER: US/09/745,003
CURRENT FILING DATE: 2000-12-20
NUMBER OF SEQ ID NOS: 13
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 7
LENGTH: 161
TYPE: PRT
ORGANISM: sheep
US-09-745-003-7

Query Match 90.9% Score 40; DB 10; Length 161;
Best Local Similarity 77.8% Pred. No. 0.55;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GDXEDRY 9
| | | | |
Db 50 GNDYEDRY 58

RESULT 10
US-09-943-906-4
Sequence 4, Application US/09943906
Patent No. US20020150571A1
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
Williamson, R. Anthony
Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.

```

STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASTSEQ Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/943,906
FILING DATE: 30-Aug-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/550,374
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX: <Unknown>
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 255 amino acids
TYPE: amino acid
STRANDEDNESS: single
MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-09-943-906-4

Query Match          90.9%; Score 40; DB 10; Length 255;
Best Local Similarity 77.8%; Pred. No. 0.89;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GDXEDRY 9
| | | | |
Db 144 GNDYEDRY 152

RESULT 11
US-10-109-551-4
; Sequence 4, Application US/10109551
; Publication No. US20020194635A1
; GENERAL INFORMATION:
; APPLICANT: DUNNE, PATRICK W.
; APPLICANT: PIEDRAHITA, JORGE
; TITLE OF INVENTION: TRANSGENIC ANIMALS RESISTANT TO TRANSMISSIBLE
; FILE REFERENCE: TAMK:207US
; CURRENT APPLICATION NUMBER: US/10/109,551
; CURRENT FILING DATE: 2002-03-28
; PRIOR APPLICATION NUMBER: 60/280,549
; PRIOR FILING DATE: 2001-03-30
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: Patentln Ver. 2.1
; SEQ ID NO 4
; LENGTH: 256
; TYPE: PRT
; ORGANISM: Ovis aries
US-10-109-551-4

Query Match          90.9%; Score 40; DB 9; Length 256;
Best Local Similarity 77.8%; Pred. No. 0.89;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GDXEDRY 9
| | | | |
Db 145 GNDYEDRY 153

```

```

RESULT 12
US-10-109-551-6
; Sequence 6, Application US/10109551
; Publication No. US20020194635A1
; GENERAL INFORMATION:
; APPLICANT: DUNNE, PATRICK W.
; APPLICANT: PIEDRAHITA, JORGE
; TITLE OF INVENTION: TRANSGENIC ANIMALS RESISTANT TO TRANSMISSIBLE
; FILE REFERENCE: TAMK:207US
; CURRENT APPLICATION NUMBER: US/10/109,551
; CURRENT FILING DATE: 2002-03-28
; PRIOR APPLICATION NUMBER: 60/280,549
; PRIOR FILING DATE: 2001-03-30
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: Patentln Ver. 2.1
; SEQ ID NO 6
; LENGTH: 256
; TYPE: PRT
; ORGANISM: Odocolleus virginianus
US-10-109-551-6

Query Match          90.9%; Score 40; DB 9; Length 256;
Best Local Similarity 77.8%; Pred. No. 0.89;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GDXEDRY 9
| | | | |
Db 145 GNDYEDRY 153

RESULT 13
US-10-109-551-8
; Sequence 8, Application US/10109551
; Publication No. US20020194635A1
; GENERAL INFORMATION:
; APPLICANT: DUNNE, PATRICK W.
; APPLICANT: PIEDRAHITA, JORGE
; TITLE OF INVENTION: TRANSGENIC ANIMALS RESISTANT TO TRANSMISSIBLE
; FILE REFERENCE: TAMK:207US
; CURRENT APPLICATION NUMBER: US/10/109,551
; CURRENT FILING DATE: 2002-03-28
; PRIOR APPLICATION NUMBER: 60/280,549
; PRIOR FILING DATE: 2001-03-30
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: Patentln Ver. 2.1
; SEQ ID NO 8
; LENGTH: 256
; TYPE: PRT
; ORGANISM: Odocolleus hemionus hemionus
US-10-109-551-8

Query Match          90.9%; Score 40; DB 9; Length 256;
Best Local Similarity 77.8%; Pred. No. 0.89;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

QY 1 GDXEDRY 9
| | | | |
Db 145 GNDYEDRY 153

RESULT 14
US-10-109-551-10
; Sequence 10, Application US/10109551
; Publication No. US20020194635A1
; GENERAL INFORMATION:
; APPLICANT: DUNNE, PATRICK W.
; APPLICANT: PIEDRAHITA, JORGE
; TITLE OF INVENTION: TRANSGENIC ANIMALS RESISTANT TO TRANSMISSIBLE
; FILE REFERENCE: TAMK:207US
; CURRENT APPLICATION NUMBER: US/10/109,551
; CURRENT FILING DATE: 2002-03-28
; PRIOR APPLICATION NUMBER: 60/280,549
; PRIOR FILING DATE: 2001-03-30
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: Patentln Ver. 2.1
; SEQ ID NO 10
; LENGTH: 256
; TYPE: PRT
; ORGANISM: Odocolleus hemionus hemionus
US-10-109-551-10

```

FILE REFERENCE: TAMK:207US
; CURRENT APPLICATION NUMBER: US/10/109,551
; CURRENT FILING DATE: 2002-03-28
; PRIOR APPLICATION NUMBER: 60/280,549
; PRIOR FILING DATE: 2001-03-30
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 10
; LENGTH: 256
; TYPE: PRT
; ORGANISM: Cervus elaphus
US-10-109-551-10

Query Match 90.9%; Score 40; DB 9; Length 256;
Best Local Similarity 77.8%; Pred. No. 0.89;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GDXEDRY 9
| | | | |
Db 145 GNDYEDRY 153

RESULT 15
US-09-745-003-11
; Sequence 11, Application US/09745003
; Patent No. US2002004212A1
; GENERAL INFORMATION:
; APPLICANT: Bazan, Fernando J
; TITLE OF INVENTION: Human Proteins; Related Reagents
; FILE REFERENCE: PRP2
; CURRENT APPLICATION NUMBER: US/09/745,003
; CURRENT FILING DATE: 2000-12-20
; NUMBER OF SEQ ID NOS: 13
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 11
; LENGTH: 163
; TYPE: PRT
; ORGANISM: Hamster sp.
US-09-745-003-11

Query Match 88.6%; Score 39; DB 10; Length 163;
Best Local Similarity 77.8%; Pred. No. 0.88;
Matches 7; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 GDXEDRY 9
| | | | |
Db 51 GNDYEDRY 59

Search completed: March 24, 2003, 17:25:04
Job time : 9.0625 secs

10

11

12

13

GenCore version 5.1.4_p5.4578
Copyright (c) 1993 - 2003 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: March 24, 2003, 17:16:57 ; Search time 37.1042 Seconds

(without alignments)
46.686 Million cell updates/sec

Title: US-09-508-828b-2

Perfect score: 58

Sequence: 1 QYRXPDXMXNQ 13

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 908470 seqs, 133250620 residues

Total number of hits satisfying chosen parameters: 908470

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

A_Geneseq.101002:*

1: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1980.DAT:*
2: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1981.DAT:*
3: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1982.DAT:*
4: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1983.DAT:*
5: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1984.DAT:*
6: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1985.DAT:*
7: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1986.DAT:*
8: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1987.DAT:*
9: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1988.DAT:*
10: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1989.DAT:*
11: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1990.DAT:*
12: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1991.DAT:*
13: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1992.DAT:*
14: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1993.DAT:*
15: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1994.DAT:*
16: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1995.DAT:*
17: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1996.DAT:*
18: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1997.DAT:*
19: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA1998.DAT:*
20: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA2000.DAT:*
21: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA2001.DAT:*
22: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA2002.DAT:*
23: /SIDSI/gcgdata/geneseq/geneseq-emb1/AA2002.DAT:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	51	87.9	27	14	AA198010
2	51	87.9	27	14	AA198011
3	51	87.9	28	14	AA198013
4	51	87.9	28	14	AA198014
5	51	87.9	28	14	AA198015
6	51	87.9	31	14	AA198007
7	51	87.9	31	14	AA198008
8	51	87.9	31	14	AA198009
9	51	87.9	33	18	AA198545
10	51	87.9	33	21	AA198546

11	51	87.9	33	21	AA198547	Rabbit prion prote
12	51	87.9	33	21	AA198548	Mouse prion prote
13	51	87.9	33	21	AA198549	Cattle prion prote
14	51	87.9	33	21	AA198550	Sheep prion prote
15	51	87.9	142	18	AA198551	Prion protein prote
16	51	87.9	178	19	AA198552	Peptide sequences
17	51	87.9	208	21	AA198553	Mouse prion prote
18	51	87.9	208	21	AA198554	Human prion prote
19	51	87.9	208	21	AA198555	Mouse prion prote
20	51	87.9	208	21	AA198556	Human prion prote
21	51	87.9	211	22	AA198557	Amino acid sequenc
22	51	87.9	217	21	AA198558	Cattle prion prote
23	51	87.9	217	21	AA198559	Cattle prion prote
24	51	87.9	219	19	AA198560	Bovine prion prote
25	51	87.9	219	20	AA198561	Bovine prion prote
26	51	87.9	245	22	AA198562	Monkey prion prote
27	51	87.9	245	22	AA198563	Cercopithe prion p
28	51	87.9	250	22	AA198564	Rabbit prion prote
29	51	87.9	253	17	AA198565	Human prion prote
30	51	87.9	253	19	AA198566	Human prion prote
31	51	87.9	253	20	AA198567	Human prion prote
32	51	87.9	253	20	AA198568	Human prion prote
33	51	87.9	253	21	AA198569	Human prion prote
34	51	87.9	253	21	AA198570	Human prion prote
35	51	87.9	253	21	AA198571	Human prion prote
36	51	87.9	253	21	AA198572	Human prion prote
37	51	87.9	253	22	AA198573	Human prion prote
38	51	87.9	253	22	AA198574	Human prion prote
39	51	87.9	253	22	AA198575	Human prion prote
40	51	87.9	253	22	AA198576	Human prion prote
41	51	87.9	253	22	AA198577	Human prion prote
42	51	87.9	253	22	AA198578	Human prion prote
43	51	87.9	253	22	AA198579	Human prion prote
44	51	87.9	253	22	AA198580	Human prion prote
45	51	87.9	253	22	AA198581	Human prion prote

ALIGNMENTS

RESULT 1

ID AAR38010 standard; protein; 27 AA.

AC AAR38010;

XX 14-OCT-1993 (first entry)

XX Prion protein region C #4.

DE Prion protein region C #4.

XX Antigen; prion; protein; region; frame shift; repeat; mutation; PrPc;

KW F5a; F5b; subfragment; antibody; treatment; spongiform encephalopathy;

KW human; sheep; cattle; cellular binding; aggregation; mammal; scrapie;

KW immune system; PrPsc; rat-to-inverso peptide; enzymatic degradation;

XX resistance.

XX Synthetic.

XX OS

XX WO9311155-A.

XX 10-JUN-1993.

XX 03-DEC-1992; 92WC-G802246.

XX 03-DEC-1991; 91GB-0025747.

XX 10-JUL-1992; 92GB-0014663.

XX (PROT-) PROTEUS MOLECULAR DESIGN LTD.

XX Fishleigh RV, Mee RP, Robson B;

XX WPI; 1993-196994/24.

PT New polypeptide(s) contg. antigenic site of prion protein -
 PT useful for treatment and diagnosis of mammalian encephalopathies
 PT e.g. Creutzfeldt-Jacob disease and Kuru
 PS Claim 15; Page 67; 82pp; English.
 CC The sequences given in AAR38007-11 represent polypeptides derived
 CC from an antigenic site, region C, of a prion protein. Prion
 CC proteins comprise six regions of interest (A-F), and two related
 CC frame shift peptides sequences caused by a repeating section in
 CC region E having a nucleic acid coding sequence frame shift mutation
 CC of +1 (Fsa) or -1 (Fsb). These peptides and subfragments of these
 CC (see AAR38012-15), and antibodies raised against these, may be used to
 CC treat or prevent spongiform encephalopathy in humans, sheep or cattle.
 CC They can be used to block cellular binding and aggregation of prion
 CC proteins and to stimulate the mammalian immune system. These peptides
 CC may be used to distinguish between the normal form of prion protein
 CC (PrPc) and the scrapie-associated form (PrPsc). These peptides may
 CC include rare or synthetic amino acids or a ratio-inverso peptide
 CC modification to improve resistance to enzymatic degradation.
 SQ Sequence 27 AA:
 Query Match 87.9%; Score 51; DB 14; Length 27;
 Best Local Similarity 69.2%; Pred. No. 0.0026;
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 OY 1 OYVYXPXDXYXNQ 13
 ||||| | | | | |
 DB 8 OYVYRPVDQYSNQ 20
 RESULT 2
 AAR38011
 ID AAR38011 standard; protein; 27 AA.
 AC AAR38011;
 XX
 DT 14-OCT-1993 (first entry)
 XX
 DE Prion protein region C #5.
 XX
 KM Antigen; prion; protein; region; frame shift; repeat; mutation; PrPc;
 KM Fsa; Fsb; subfragment; antibody; treatment; spongiform encephalopathy;
 KM human; sheep; cattle; cellular binding; aggregation; mammal; scrapie;
 KM immune system; PrPsc; ratio-inverso peptide; enzymatic degradation;
 KM resistance.
 XX
 OS Synthetic.
 XX
 FN WO9311155-A.
 XX
 PD 10-JUN-1993.
 XX
 PE 03-DEC-1992; 92WO-GB02246.
 XX
 PR 03-DEC-1991; 91GB-0025747.
 PR 10-JUL-1992; 92GB-0014663.
 XX
 PA (PROT-) PROTEUS MOLECULAR DESIGN LTD.
 XX
 PI Fishleigh RV, Mee RP, Robson B;
 XX
 DR WPI; 1993-196994/24.
 XX
 PT New polypeptide(s) contg. antigenic site of prion protein -
 PT useful for treatment and diagnosis of mammalian encephalopathies
 PT e.g. Creutzfeldt-Jacob disease and Kuru
 PS Claim 15; Page 67; 82pp; English.
 CC The sequences given in AAR38007-11 represent polypeptides derived
 CC from an antigenic site, region C, of a prion protein. Prion

CC proteins comprise six regions of interest (A-F), and two related
 CC frame shift peptides sequences caused by a repeating section in
 CC region E having a nucleic acid coding sequence frame shift mutation
 CC of +1 (Fsa) or -1 (Fsb). These peptides and subfragments of these
 CC (see AAR38012-15), and antibodies raised against these, may be used to
 CC treat or prevent spongiform encephalopathy in humans, sheep or cattle.
 CC They can be used to block cellular binding and aggregation of prion
 CC proteins and to stimulate the mammalian immune system. These peptides
 CC may be used to distinguish between the normal form of prion protein
 CC (PrPc) and the scrapie-associated form (PrPsc). These peptides may
 CC include rare or synthetic amino acids or a ratio-inverso peptide
 CC modification to improve resistance to enzymatic degradation.
 SQ Sequence 27 AA:
 Query Match 87.9%; Score 51; DB 14; Length 27;
 Best Local Similarity 69.2%; Pred. No. 0.0026;
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 OY 1 OYVYXPXDXYXNQ 13
 ||||| | | | | |
 DB 8 OYVYRPVDQYSNQ 20
 RESULT 3
 AAR38013
 ID AAR38013 standard; protein; 28 AA.
 AC AAR38013;
 XX
 DT 14-OCT-1993 (first entry)
 XX
 DE Prion protein region C subfragment #1.
 XX
 KM Antigen; prion; protein; region; frame shift; repeat; mutation; PrPc;
 KM Fsa; Fsb; subfragment; antibody; treatment; spongiform encephalopathy;
 KM human; sheep; cattle; cellular binding; aggregation; mammal; scrapie;
 KM immune system; PrPsc; ratio-inverso peptide; enzymatic degradation;
 KM resistance.
 XX
 OS Synthetic.
 XX
 FN WO9311155-A.
 XX
 PD 10-JUN-1993.
 XX
 PE 03-DEC-1992; 92WO-GB02246.
 XX
 PR 03-DEC-1991; 91GB-0025747.
 PR 10-JUL-1992; 92GB-0014663.
 XX
 FT Key Location/Qualifiers
 FT Misc-difference 1 /note= "One or more residues or may be absent"
 FT Misc-difference 2 /note= "May be absent"
 FT Misc-difference 3 /note= "May be absent"
 FT Misc-difference 4 /note= "May be absent"
 FT Misc-difference 5 /note= "May be absent"
 FT Misc-difference 24 /note= "May be absent"
 FT Misc-difference 25 /note= "May be absent"
 FT Misc-difference 26 /note= "May be absent"
 FT Misc-difference 27 /note= "May be absent"
 FT Misc-difference 28 /note= "May be absent"
 FT /note= "One or more residue or may be absent"
 XX
 PN WO9311155-A.
 XX
 PD 10-JUN-1993.
 XX
 PE 03-DEC-1992; 92WO-GB02246.
 XX
 PR 03-DEC-1991; 91GB-0025747.
 PR 10-JUL-1992; 92GB-0014663.
 XX

PA (PROT-) PROTEUS MOLECULAR DESIGN LTD.
 XX
 PI Fishleigh RV, Wee RP, Robson B;
 XX
 DR WPI: 1993-196994/24.
 XX
 PT New polypeptide(s) contg. antigenic site of prion protein -
 PT useful for treatment and diagnosis of mammalian encephalopathies
 PT e.g. Creutzfeldt-Jacob disease and kuru
 PS
 PS Claim 17; Page 67; 82pp; English.
 XX
 CC The sequences given in AAR38012-15 represent polypeptide subfragments
 CC derived from an antigenic site, region C, of a prion protein. Prion
 CC proteins comprise six regions of interest (A-F), and two related
 CC frame shift peptide sequences caused by a repeating section in
 CC region E having a nucleic acid coding sequence frame shift mutation
 CC of +1 (Fsa) or -1 (Fsb). These subfragments or the full length
 CC peptides (see AAR38006-11), and antibodies raised against these, may be
 CC used to treat or prevent spongiform encephalopathy in humans, sheep or
 CC cattle. They can be used to block cellular binding and aggregation of
 CC prion proteins and to stimulate the mammalian immune system. These
 CC peptides may be used to distinguish between the normal form of prion
 CC protein (PrPc) and the scrapie-associated form (PrPsc). These peptides
 CC may include rare or synthetic amino acids or a ratio-inverso peptide
 CC modification to improve resistance to enzymatic degradation.
 CC
 SQ Sequence 28 AA:
 Query Match 87.9%; Score 51; DB 14; Length 28;
 Best Local Similarity 69.2%; Pred. No. 0.0027;
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 1 QVYYPXDXYYXNQ 13
 |||||
 DB 6 QVYRPVDPQYSNQ 18
 RESULT 4
 AAR38014
 ID AAR38014 standard; protein; 28 AA.
 XX
 AC AAR38014;
 XX
 DT 14-OCT-1993 (first entry)
 XX
 DE Prion protein region C subfragment #2.
 XX
 KW Antigen; prion; protein; region; frame shift; repeat; mutation; PrPc;
 KW Fsa; Fsb; subfragment; antibody; treatment; spongiform encephalopathy;
 KW human; sheep; cattle; cellular binding; aggregation; mammal; scrapie;
 KW immune system; PrPsc; ratio-inverso peptide; enzymatic degradation;
 KW resistance.
 KW
 XX Synthetic.
 XX
 OS
 FH Key Location/Qualifiers
 FH Misc-difference 1 /note= "One or more residues or may be absent"
 FT Misc-difference 2 /note= "May be absent"
 FT Misc-difference 3 /note= "May be absent"
 FT Misc-difference 4 /note= "May be absent"
 FT Misc-difference 5 /note= "May be absent"
 FT Misc-difference 24 /note= "May be absent"
 FT Misc-difference 25 /note= "May be absent"
 FT Misc-difference 26 /note= "May be absent"
 FT Misc-difference 26 /note= "May be absent"

FT Misc-difference 27 /note= "May be absent"
 FT Misc-difference 28 /note= "One or more residue or may be absent"
 XX
 XX W09311155-A.
 XX
 PD 10-JUN-1993.
 XX
 XX 03-DEC-1992; 92WO-GB02246.
 XX
 XX 03-DEC-1991; 91GB-0025747.
 PR 10-JUL-1992; 92GB-0014663.
 XX
 PA (PROT-) PROTEUS MOLECULAR DESIGN LTD.
 PI Fishleigh RV, Wee RP, Robson B;
 XX
 DR WPI: 1993-196994/24.
 XX
 PT New polypeptide(s) contg. antigenic site of prion protein -
 PT useful for treatment and diagnosis of mammalian encephalopathies
 PT e.g. Creutzfeldt-Jacob disease and kuru
 PS
 PS Claim 17; Page 67; 82pp; English.
 XX
 CC The sequences given in AAR38012-15 represent polypeptide subfragments
 CC derived from an antigenic site, region C, of a prion protein. Prion
 CC proteins comprise six regions of interest (A-F), and two related
 CC frame shift peptide sequences caused by a repeating section in
 CC region E having a nucleic acid coding sequence frame shift mutation
 CC of +1 (Fsa) or -1 (Fsb). These subfragments or the full length
 CC peptides (see AAR38006-11), and antibodies raised against these, may be
 CC used to treat or prevent spongiform encephalopathy in humans, sheep or
 CC cattle. They can be used to block cellular binding and aggregation of
 CC prion proteins and to stimulate the mammalian immune system. These
 CC peptides may be used to distinguish between the normal form of prion
 CC protein (PrPc) and the scrapie-associated form (PrPsc). These peptides
 CC may include rare or synthetic amino acids or a ratio-inverso peptide
 CC modification to improve resistance to enzymatic degradation.
 CC
 SQ Sequence 28 AA:
 Query Match 87.9%; Score 51; DB 14; Length 28;
 Best Local Similarity 69.2%; Pred. No. 0.0027;
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 1 QVYYPXDXYYXNQ 13
 |||||
 DB 6 QVYRPVDPQYSNQ 18
 RESULT 5
 AAR38015
 ID AAR38015 standard; protein; 28 AA.
 XX
 AC AAR38015;
 XX
 DT 14-OCT-1993 (first entry)
 XX
 DE Prion protein region C subfragment #3.
 XX
 KW Antigen; prion; protein; region; frame shift; repeat; mutation; PrPc;
 KW Fsa; Fsb; subfragment; antibody; treatment; spongiform encephalopathy;
 KW human; sheep; cattle; cellular binding; aggregation; mammal; scrapie;
 KW immune system; PrPsc; ratio-inverso peptide; enzymatic degradation;
 KW resistance.
 KW
 XX Synthetic.
 XX
 OS
 FH Key Location/Qualifiers
 FH Misc-difference 1 /note= "One or more residues or may be absent"
 FT Misc-difference 1 /note= "One or more residues or may be absent"

(PROT-) PROTEUS MOLECULAR DESIGN LTD,
Fishleigh RV, Mee RP, Robson B;

CC BSE (bovine spongiform encephalopathy). The method allows a faster,
CC simpler and more reliable method for monitoring cattle and sheep for
CC the presence of aberrant prion protein before it reaches the human
CC and animal food chain. In the invention antipeptide antibodies were
CC raised against sheep prion protein peptides. The present sequence is
CC the human prion protein sequence homologous to the sheep peptide
CC indicated.

XX Sequence 33 AA;

Query Match 87.9%; Score 51; DB 21; Length 33;

Best Local Similarity 69.2%; Pred. No. 0.0032; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXPXDXYNQ 13
DB 19 QVYRPVDDYSNQ 31

RESULT 11

AAB15055 standard; Peptide; 33 AA.

XX AAB15055;

DT 18-DEC-2000 (first entry)

DE Rabbit prion protein peptide homologous to ovine sequence 145-177.

KW Prion; PrP; guanidine thiocyanate; gdnSCN; TSE; BSE;

KM transmissible spongiform encephalopathy; antibody;

KW bovine spongiform encephalopathy; sheep; cattle; human.

XX Oryctolagus cuniculus.

PN WO200048003-A1.

PD 17-AUG-2000.

PE 09-FEB-2000; 2000WO-NL00079.

PR 11-FEB-1999; 99EP-0200391.

PA (DIEN-) STICHTING DIENST LANDBOUWKUNDIG ONDERZOE.

PI Garssen GJ, Jacobs JG, Langerfeld JPM, Smits MA, Van Keulen LJM;

PI Schreuder BEC, Bosiers A;

DR WPI: 2000-506099/45.

PT Use of guanidine thiocyanate for reducing risk of false-positive

PT results in testing mammalian sample for aberrant prion protein, useful

PT for detection of transmissible spongiform encephalopathies -

PS Disclosure; Fig 2; 49pp; English.

XX The present invention relates to a method for reducing the risk of

XX scoring a false positive result in testing a sample for aberrant

XX prion protein. The method involves the use of guanidine thiocyanate

XX (gdnSCN) or its functional equivalent. This test is highly useful for

XX testing for transmissible spongiform encephalopathies (TSEs) such as

XX BSE (bovine spongiform encephalopathy). The method allows a faster,

XX simpler and more reliable method for monitoring cattle and sheep for

XX the presence of aberrant prion protein before it reaches the human

XX and animal food chain. In the invention antipeptide antibodies were

XX raised against sheep prion protein peptides. The present sequence is

XX the rabbit prion protein sequence homologous to the sheep peptide

XX indicated.

XX Sequence 33 AA;

Query Match 87.9%; Score 51; DB 21; Length 33;

Best Local Similarity 69.2%; Pred. No. 0.0032;

Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXPXDXYNQ 13
DB 19 QVYRPVDDYSNQ 31

RESULT 12

AAB15057 standard; Peptide; 33 AA.

XX AAB15057;

DT 18-DEC-2000 (first entry)

DE Mouse prion protein peptide homologous to ovine sequence 145-177.

KW Prion; PrP; guanidine thiocyanate; gdnSCN; TSE; BSE;

KM transmissible spongiform encephalopathy; antibody;

KW bovine spongiform encephalopathy; sheep; cattle; human.

XX Mus sp.

PN WO200048003-A1.

PD 17-AUG-2000.

PE 09-FEB-2000; 2000WO-NL00079.

PR 11-FEB-1999; 99EP-0200391.

PA (DIEN-) STICHTING DIENST LANDBOUWKUNDIG ONDERZOE.

PI Garssen GJ, Jacobs JG, Langerfeld JPM, Smits MA, Van Keulen LJM;

PI Schreuder BEC, Bosiers A;

DR WPI: 2000-506099/45.

PT Use of guanidine thiocyanate for reducing risk of false-positive

PT results in testing mammalian sample for aberrant prion protein, useful

PT for detection of transmissible spongiform encephalopathies -

PS Disclosure; Fig 2; 49pp; English.

XX The present invention relates to a method for reducing the risk of

XX scoring a false positive result in testing a sample for aberrant

XX prion protein. The method involves the use of guanidine thiocyanate

XX (gdnSCN) or its functional equivalent. This test is highly useful for

XX testing for transmissible spongiform encephalopathies (TSEs) such as

XX BSE (bovine spongiform encephalopathy). The method allows a faster,

XX simpler and more reliable method for monitoring cattle and sheep for

XX the presence of aberrant prion protein before it reaches the human

XX and animal food chain. In the invention antipeptide antibodies were

XX raised against sheep prion protein peptides. The present sequence is

XX the mouse prion protein sequence homologous to the sheep peptide

XX indicated.

XX Sequence 33 AA;

Query Match 87.9%; Score 51; DB 21; Length 33;

Best Local Similarity 69.2%; Pred. No. 0.0032; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXPXDXYNQ 13
DB 19 QVYRPVDDYSNQ 31

RESULT 13

AAB15058 standard; Peptide; 33 AA.

XX AAB15058;

XX 18-DEC-2000 (first entry)
 PD Cattle prion protein peptide homologous to ovine sequence 145-177.
 DE
 XX
 XX Prion; PrP; guanidine thiocyanate; gdnSCN; TSE; BSE;
 KM transmissible spongiform encephalopathy; antibody;
 KM bovine spongiform encephalopathy; sheep; cattle; human.
 XX
 OS Bos taurus.
 XX
 FN WO200048003-A1.
 PD 17-AUG-2000.
 PD 09-FEB-2000; 2000MO-NL00079.
 PF 11-FEB-1999; 99EP-0200391.
 PR (DIEN-) STICHTING DIENST LANDBOUWKUNDIG ONDERZOE.
 PA
 XX Garssen GJ, Jacobs JG, Langeveld JPM, Smits MA, Van Keulen LJM,
 PI Schreuder BEC, Bossers A;
 DR WPI: 2000-506099/45.
 XX
 XX Use of guanidine thiocyanate for reducing risk of false-positive
 PT results in testing mammalian sample for aberrant prion protein, useful
 PT for detection of transmissible spongiform encephalopathies -
 XX
 XX Disclosure: Fig 2; 49pp; English.
 PS
 XX The present invention relates to a method for reducing the risk of
 CC scoring a false positive test result in testing a sample for aberrant
 CC prion protein. The method involves the use of guanidine thiocyanate
 CC (gdnSCN) or its functional equivalent. This test is highly useful for
 CC testing for transmissible spongiform encephalopathies (TSEs) such as
 CC BSE (bovine spongiform encephalopathy). The method allows a faster,
 CC simpler and more reliable method for monitoring cattle and sheep for
 CC the presence of aberrant prion protein before it reaches the human
 CC and animal food chain. In the invention antipeptide antibodies were
 CC raised against sheep prion protein peptides. The present sequence is
 CC the cattle prion protein sequence homologous to the sheep peptide
 CC indicated.
 CC
 SQ Sequence 33 AA;
 XX
 XX Query Match 87.9%; Score 51; DB 21; Length 33;
 XX Best Local Similarity 69.2%; Pred. No. 0.0032;
 XX Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 OY 1 QVYXPXDXYXNQ 13
 DB 19 QVYRPVDQYSNQ 31
 XX
 XX RESULT 14
 XX AAB15059
 ID AAB15059 standard; Peptide; 33 AA.
 XX
 AC AAB15059;
 XX
 XX 18-DEC-2000 (first entry)
 XX
 DE Sheep prion protein peptide from amino acids 145-177.
 XX
 XX Prion; PrP; guanidine thiocyanate; gdnSCN; TSE; BSE;
 KM transmissible spongiform encephalopathy; antibody;
 KM bovine spongiform encephalopathy; sheep; cattle; human.
 XX
 OS Ovis aries.
 XX
 FN WO200048003-A1.

XX 17-AUG-2000.
 PD 09-FEB-2000; 2000MO-NL00079.
 DE
 XX
 XX Prion; PrP; guanidine thiocyanate; gdnSCN; TSE; BSE;
 KM transmissible spongiform encephalopathy; antibody;
 KM bovine spongiform encephalopathy; sheep; cattle; human.
 XX
 OS Bos taurus.
 XX
 FN WO200048003-A1.
 PD 17-AUG-2000.
 PD 09-FEB-2000; 2000MO-NL00079.
 PF 11-FEB-1999; 99EP-0200391.
 PR (DIEN-) STICHTING DIENST LANDBOUWKUNDIG ONDERZOE.
 PA
 XX Garssen GJ, Jacobs JG, Langeveld JPM, Smits MA, Van Keulen LJM,
 PI Schreuder BEC, Bossers A;
 DR WPI: 2000-506099/45.
 XX
 XX Use of guanidine thiocyanate for reducing risk of false-positive
 PT results in testing mammalian sample for aberrant prion protein, useful
 PT for detection of transmissible spongiform encephalopathies -
 XX
 XX Disclosure: Fig 2; 49pp; English.
 PS
 XX The present invention relates to a method for reducing the risk of
 CC scoring a false positive test result in testing a sample for aberrant
 CC prion protein. The method involves the use of guanidine thiocyanate
 CC (gdnSCN) or its functional equivalent. This test is highly useful for
 CC testing for transmissible spongiform encephalopathies (TSEs) such as
 CC BSE (bovine spongiform encephalopathy). The method allows a faster,
 CC simpler and more reliable method for monitoring cattle and sheep for
 CC the presence of aberrant prion protein before it reaches the human
 CC and animal food chain. In the invention antipeptide antibodies were
 CC raised against sheep prion protein peptides such as the present
 CC sequence.
 CC
 SQ Sequence 33 AA;
 XX
 XX Query Match 87.9%; Score 51; DB 21; Length 33;
 XX Best Local Similarity 69.2%; Pred. No. 0.0032;
 XX Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 OY 1 QVYXPXDXYXNQ 13
 DB 19 QVYRPVDQYSNQ 31
 XX
 XX RESULT 15
 XX AAM17686
 ID AAM17686 standard; peptide; 142 AA.
 XX
 AC AAM17686;
 XX
 XX 14-JAN-1998 (first entry)
 XX
 DE Prion protein peptide Hu 90-231.
 XX
 XX Prion protein; PrP; alpha helical domain; screening; inhibition;
 KM binding; scrapie; bovine spongiform encephalopathy; BSE; CJD;
 KM Creutzfeldt-Jakob disease; kuru; GSS; FFI; fatal familial insomnia;
 KM Gerstmann-Straussler-Scheinker disease; hamster; human.
 XX
 OS Homo sapiens.
 XX
 FN WO9716728-A1.
 PD 09-MAY-1997.
 PD 28-OCT-1996; 96MO-US17462.
 PF 02-NOV-1995; 95US-0556823.
 PR (REGC) UNIV CALIFORNIA.
 PA
 XX Cohen FE, Kaneko K, Prusiner SB;
 PI WPI: 1997-272248/24.
 DR

XX Prion proteins (PrPs) having at least one alpha-helical domain -
PT used in assays for screening compounds able to inhibit or decrease
PT the binding of PrP peptide(s) to cellular prion proteins or
PT peptide(s)

XX
PS Claim 11; Page 7-38; 50pp; English.

XX
CC The present sequence represents a prion protein (PrP) peptide.
CC PrP has an ability to induce a conformational change in cellular
CC prion protein (PrP-c). Methods, for screening compounds which
CC inhibit the binding of PrP-c to a PrP peptide, are used for screening
CC for drugs that may be useful in the treatment prion-related disease
CC e.g. scrapie, BSE (bovine spongiform encephalopathy), CJD
CC (Creutzfeldt-Jakob disease), Kuru, GSS (Gerstmann-Strausler-Scheinker
CC disease) and FFI (fatal familial insomnia).

XX
SO Sequence 142 AA:

Query Match 87.9%; Score 51; DB 18; Length 142;

Best Local Similarity 69.2%; Pred. No. 0.015;

Matches 9; Conservative 0; Mismatches 4; Indels 0; Caps 0;

OY 1 QVYXXPDXXNQ 13

DB 71 QVYRPMDEYSNQ 83

Search completed: March 24, 2003, 17:19:41
Job time : 38.1042 secs

10

11

12

GenCore version 5.1.4-p5_4578
Copyright (c) 1993 - 2003 Compugen Ltd.

OM protein - protein search, using sw model

Run on: March 24, 2003, 17:22:16 ; Search time 16.25 Seconds
(without alignments)
76,908 Million cell updates/sec

Title: US-09-508-828b-2
Perfect score: 58
Sequence: 1 QVYXPXDXNNQ 13

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 283224 seqs, 96134422 residues
Total number of hits satisfying chosen parameters: 283224

Minimum DB seq length: 0
Maximum DB seq length: 200000000
Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :
1: PIR73:*
2: PIR1:*
3: PIR3:*
4: PIR4:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	51	87.9	236	2 A53892	prion-related prot
2	51	87.9	239	2 S53633	major prion protei
3	51	87.9	241	2 S71056	major prion protei
4	51	87.9	241	2 S71048	major prion protei
5	51	87.9	245	2 S53627	major prion protei
6	51	87.9	245	2 S71045	major prion protei
7	51	87.9	252	2 I61848	major prion protei
8	51	87.9	252	2 S53631	major prion protei
9	51	87.9	252	2 JC6175	prion protein - ra
10	51	87.9	253	1 U7HU	major prion protei
11	51	87.9	253	2 I37032	major prion protei
12	51	87.9	253	2 I84423	major prion protei
13	51	87.9	253	2 S53618	major prion protei
14	51	87.9	253	2 S53619	major prion protei
15	51	87.9	253	2 S53620	major prion protei
16	51	87.9	253	2 S71055	major prion protei
17	51	87.9	253	2 S53623	major prion protei
18	51	87.9	253	2 S53624	major prion protei
19	51	87.9	253	2 S53625	major prion protei
20	51	87.9	253	2 S53614	major prion protei
21	51	87.9	253	2 S53616	major prion protei
22	51	87.9	254	2 A23544	major prion protei
23	51	87.9	256	2 JU0268	major prion protei
24	51	87.9	256	2 S71149	prion protein - go
25	51	87.9	256	2 A54281	major prion protei
26	51	87.9	257	2 JQ1900	major prion protei
27	51	87.9	260	2 S53629	major prion protei
28	51	87.9	264	2 S37137	prion protein - gr
29	51	87.9	264	2 A54330	major prion protei

30	50	86.2	232	2 S71041	major prion protei
31	50	86.2	252	2 S53634	major prion protei
32	50	86.2	254	1 U7HYIH	major prion Prp-Sc
33	50	86.2	254	2 A34759	prion protein - ch
34	50	86.2	254	2 B34759	prion protein - go
35	50	86.2	257	2 A23545	major prion Prp27-
36	46	79.3	253	2 I61847	major prion protei
37	46	79.3	253	2 S53635	prion protein - si
38	46	79.3	253	2 S53617	hypothetical prote
39	39	67.2	400	2 S76066	hypothetical prote
40	37	63.8	295	2 B82674	conserved hypotnet
41	37	63.8	458	2 T25115	hypothetical prote
42	36	62.1	146	2 E69773	conserved hypotnet
43	36	62.1	396	2 PQ0813	glycoprotein E1 -
44	36	62.1	568	2 S42225	major envelope gly
45	36	62.1	584	2 A49596	genome polypeptide

ALIGNMENTS

RESULT 1
A53892
Prion-related protein - rat (fragment)
C:Species: Rattus norvegicus (Norway rat)
C:Date: 07-Oct-1994 #sequence_revision 07-Oct-1994 #text_change 13-Aug-1999
C:Accession: A53892
R:Info: Y.C.: Tokens: 2; Lfm: E.; Lackey, A.; Woo, C.H.; Button, J.D.; Clawson, G.A.
Lab: Invest: 57, 370-374, 1987
A:Title: Cloning of rat "prion-related protein" cDNA.
A:Reference number: A53892; MVID:88037055; PMID:2889848
A:Accession: A53892
A:Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-226 <L1A>
A:Cross-references: GB:M20313; NID:g206391; PIDN:AAA41947.1; PID:g206392
C:Superfamily: major prion protein

Query Match 87.9%; Score 51; DB 2; Length 226;
Best local Similarity 69.2%; Pred. NO. 0.005;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 QVYXPXDXNNQ 13
DB 132 QVYXPVDPQXNQ 144

RESULT 2
S53633
Major prion protein - doucoucouli (fragment)
C:Species: Actus trivirgatus (doucoucouli, night monkey, owl monkey)
C:Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 13-Aug-1999
C:Accession: S53633; S71042
R:Schuetz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MVID:95139066; PMID:7837269
A:Accession: S53633
A:Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-239 <SCH>
A:Cross-references: EMBL:U08293
R:Schuetz, H.M.
Submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71042
A:Molecule type: DNA
A:Residues: 1-202, 'E', 204-239 <SCW>
A:Cross-references: EMBL:U08293; NID:g474344; PIDN:AAC50082.1; PID:g474345
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane

Query Match 87.9%; Score 51; DB 2; Length 239;

Best Local Similarity 69.2%; Pred. No. 0.0053;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXXPDXYXNQ 13
|||||
Db 152 QVYRVPDQXNQ 164

RESULT 3

S71056

Major prion protein - mandrill (fragment)

C:Species: Papio sphinx, Mandrillus sphinx (mandrill)

C>Date: 27-Oct-1996 #sequence_revision 14-Feb-1997 #text_change 13-Aug-1999

C:Accession: S71056; S53621

R:Schatzl, H.M.

Submitted to the EMBL Data Library, April 1994

A:Reference number: S71041

A:Accession: S71056

A:Molecule type: DNA

A:Residues: 1-241 <SCH>

A:Cross-References: EMBL:U08303; NID:9474364; PID:AMC50091.1; PID:9474365

R:Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; MUID:95139066; PMID:7837269

A:Accession: S53621

A:Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 1-203, 'R', 205-240 <SCW>

A:Cross-References: EMBL:U08303

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane

Query Match 87.9%; Score 51; DB 2; Length 241;
Best Local Similarity 69.2%; Pred. No. 0.0053;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXXPDXYXNQ 13
|||||
Db 153 QVYRVPDQXNQ 165

RESULT 4

S71048

Major prion protein - Callicebus moloch (fragment)

C:Species: Callicebus moloch

C>Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 13-Aug-1999

C:Accession: S71048; S53632

R:Schatzl, H.M.

Submitted to the EMBL Data Library, April 1994

A:Reference number: S71041

A:Accession: S71048

A:Molecule type: DNA

A:Residues: 1-241 <SCH>

A:Cross-References: EMBL:U08312; NID:9475585; PID:AMC50100.1; PID:9475586

R:Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; MUID:95139066; PMID:7837269

A:Accession: S53632

A:Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 1-203, 'R', 205-240 <SCW>

A:Cross-References: EMBL:U08312

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane

Query Match 87.9%; Score 51; DB 2; Length 241;
Best Local Similarity 69.2%; Pred. No. 0.0053;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXXPDXYXNQ 13
|||||

Db 153 QVYRVPDQXNQ 165

RESULT 5

S53627

Major prion protein - green monkey

C:Species: Cercopithecus aethiops (green monkey, grivet)

C>Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 13-Aug-1999

C:Accession: S53627; S71043

R:Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; MUID:95139066; PMID:7837269

A:Accession: S53627

A:Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 1-245 <SCH>

A:Cross-References: EMBL:U08291

R:Schatzl, H.M.

Submitted to the EMBL Data Library, April 1994

A:Reference number: S71041

A:Accession: S71043

A:Molecule type: DNA

A:Residues: 1-10, 'V', 12-202, 'E', 204-245 <SCW>

A:Cross-References: EMBL:U08291; NID:9474340; PID:AMC50080.1; PID:9474341

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane

Query Match 87.9%; Score 51; DB 2; Length 245;
Best Local Similarity 69.2%; Pred. No. 0.0054;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXXPDXYXNQ 13
|||||
Db 152 QVYRVPDQXNQ 164

RESULT 6

S71045

Major prion protein - Cercopithecus diana

C:Species: Cercopithecus diana

C>Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 13-Aug-1999

C:Accession: S71045; S53628

R:Schatzl, H.M.

Submitted to the EMBL Data Library, April 1994

A:Reference number: S71041

A:Accession: S71045

A:Molecule type: DNA

A:Residues: 1-245 <SCH>

A:Cross-References: EMBL:U08292; NID:9474342; PID:AMC50081.1; PID:9474343

R:Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; MUID:95139066; PMID:7837269

A:Accession: S53628

A:Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 8-10, 'L', 12-202, 'R', 204-239 <SCW>

A:Cross-References: EMBL:U08292

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane

Query Match 87.9%; Score 51; DB 2; Length 245;
Best Local Similarity 69.2%; Pred. No. 0.0054;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXXPDXYXNQ 13
|||||
Db 152 QVYRVPDQXNQ 164

RESULT 7

I61848

major prion protein precursor - common squirrel monkey
 C:Species: *Salimiri sciureus* (common squirrel monkey)
 C>Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change 13-Aug-1999
 C:Accession: 161848
 R:Cervenkova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Pettrone, K.; Rubenstein, R.; D.
 Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994
 A:Title: Infectious amyloid precursor gene sequences in primates used for experimental
 A:Reference number: 136907; MUID:95083661; PMID:7991600
 A:Accession: 161848
 A:Status: preliminary; translated from GB/EMBL/DBJ
 A:Molecule type: DNA
 A:Residues: 1-252 <RES>
 A:Cross-references: EMBL:U15165; NID:g5595852; PIDN:AAA6636.1; PID:g5595853
 C:Superfamily: major prion protein

Query Match 87.9%; Score 51; DB 2; Length 252;
 Best Local Similarity 69.2%; Pred. No. 0.0056;
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXPXDXKXNQ 13
 |||||
 Db 159 QVYRPVQYNSQ 171

RESULT 8
 553631
 major prion protein - brown capuchin
 C:Species: *Cebus apella* (brown capuchin, black-capped capuchin)
 C>Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 13-Aug-1999
 C:Accession: S53631; S71044
 R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 J. Mol. Biol. 245, 362-374, 1995
 A:Title: Prion protein gene variation among primates.
 A:Reference number: S53614; MUID:95139066; PMID:7837269
 A:Accession: S53631
 A:Status: nucleic acid sequence not shown
 A:Molecule type: DNA
 A:Residues: 1-252 <SCH>
 A:Cross-references: EMBL:U08295
 R:Schaezel, H.M.
 submitted to the EMBL Data Library, April 1994
 A:Reference number: S71041
 A:Accession: S71044
 A:Molecule type: DNA
 A:Residues: 1-209, 'E', 211-252 <SCW>
 A:Cross-references: EMBL:U08295; NID:g474348; PIDN:AAC50084.1; PID:g474349
 C:Superfamily: major prion protein
 C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane pro

Query Match 87.9%; Score 51; DB 2; Length 252;
 Best Local Similarity 69.2%; Pred. No. 0.0056;
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXPXDXKXNQ 13
 |||||
 Db 159 QVYRPVQYNSQ 171

RESULT 9
 JC6175
 prion protein - rabbit
 C:Species: *Oryctolagus cuniculus* (domestic rabbit)
 C>Date: 11-Apr-1997 #sequence_revision 09-May-1997 #text_change 13-Aug-1999
 C:Accession: JC6175
 R:Loftus, B.; Rogers, M.
 Gene 184, 215-219, 1997
 A:Title: Characterization of a prion protein (PrP) gene from rabbit: a species with appa
 A:Reference number: JC6175; MUID:97183665; PMID:9031631
 A:Accession: JC6175
 A:Molecule type: DNA
 A:Residues: 1-252 <LOF>
 A:Cross-references: GB:U08334; NID:g1490412; PIDN:AAC48697.1; PID:g1490413
 C:Comment: This protein is a cellular protein. It is involved in the neurodegenerative p

C:Genetics:
 A:Gene: PrP
 C:Superfamily: major prion protein
 C:Keywords: disulfide bond; prion

Query Match 87.9%; Score 51; DB 2; Length 252;
 Best Local Similarity 69.2%; Pred. No. 0.0056;
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXPXDXKXNQ 13
 |||||
 Db 159 QVYRPVQYNSQ 171

RESULT 10
 UJHU
 major prion protein precursor - human
 N:Alternate names: 11k amyloid protein; 27-30k statoglycoprotein; PrP 27-30; PrP 33-3
 C:Species: *Homo sapiens* (man)
 C>Date: 25-Oct-1987 #sequence_revision 12-Apr-1996 #text_change 16-Jun-2000
 C:Accession: A24173; A40372; A05017; S14078; I54322; I68597; I58135; I59184; I79633;
 R:Kretschmar, H.A.; Stowring, L.E.; Westaway, D.; Stubblefield, W.H.; Prusiner, S.B.;
 DNA 5, 315-324, 1986
 A:Title: Molecular cloning of a human prion protein cDNA.
 A:Reference number: A24173; MUID:86300093; PMID:3755672
 A:Accession: A24173
 A:Molecule type: mRNA
 A:Residues: 1-253 <KRE>
 A:Cross-references: GB:M13899; NID:g190467; PIDN:AAA60182.1; PID:g190468
 R:Puckett, C.; Concannon, P.; Casey, C.; Hood, L.
 Am. J. Hum. Genet. 49, 320-329, 1991
 A:Title: Genomic structure of the human prion protein gene.
 A:Reference number: A40372; MUID:91328137; PMID:1678248
 A:Accession: A40372
 A:Status: not compared with conceptual translation

A:Molecule type: DNA
 A:Residues: 1-80, 89-253 <PUC>
 A:Cross-references: GB:X83416; NID:g747846; PIDN:CAA58442.1; PID:g747847
 A:Note: the deletion may be a polymorphism; the alternative deletion of 82-89 could n
 R:Liao, Y.C.J.; Lebo, R.V.; Clawson, G.A.; Smuckler, E.A.
 Science 233, 364-367, 1986
 A:Reference number: A05017; MUID:86261778; PMID:3014653
 A:Accession: A05017
 A:Molecule type: mRNA
 A:Residues: 8-117, 119-253 <LIA>
 A:Cross-references: GB:PD0015; NID:g220015; PIDN:BAAO0011.1; PID:g220016; GB:M1367;
 R:Tagliavini, F.; Prelli, F.; Ghiso, J.; Bugiani, O.; Serban, D.; Prusiner, S.B.; Far
 EMBO J. 10, 513-519, 1991
 A:Title: Amyloid protein of Gerstmann-Strausler-Scheinker disease (Indiana kindred)
 A:Reference number: S14078; MUID:91160504; PMID:1672107
 A:Accession: S14078
 A:Molecule type: protein
 A:Residues: 58-72, 'X', 74-76, 'XX', 79, 'XXX', 83-86, 111-128, 'V', 130-150 <TAG>
 R:Diedrich, J.F.; Knopman, D.S.; List, J.F.; Olson, K.; Frey, W.H.
 Hum. Mol. Genet. 1, 443-444, 1992
 A:Title: Deletion in the prion protein gene in a demented patient.
 A:Reference number: I54322; MUID:93250789; PMID:1363802
 A:Accession: I54322
 A:Status: preliminary; translated from GB/EMBL/DBJ
 A:Molecule type: DNA
 A:Residues: 9-83, 92-240 <RES>
 A:Cross-references: GB:M61929; NID:g190517; PIDN:AAB59442.1; PID:g190518
 A:Accession: I68597
 A:Status: translated from GB/EMBL/DBJ
 A:Molecule type: DNA
 A:Residues: 8-240 <RES>
 A:Cross-references: GB:M61930; NID:g190519; PIDN:AAB59443.1; PID:g190520
 R:Brown, P.; Goldfarb, L.G.; McCombie, W.R.; Nieto, A.; Squillacote, D.; Sheremata, W
 Neurology 42, 422-427, 1992
 A:Title: Atypical Creutzfeldt-Jakob disease in an American family with an insert muta
 A:Reference number: I58135; MUID:92140671; PMID:1736177
 A:Accession: I58135
 A:Status: preliminary; translated from GB/EMBL/DBJ

A:Molecule type: DNA
A:Residues: 51-61, 'PHGGMGOPHHGGMGPHHGGMGOPHHGGMGOPHHGG' <RES>
R:Cross-references: GB:S80539, NID:g244698, PIDN:AAZ1334.1, PID:g244699
R:Goldfarb, L.G.; Brown, P.; Gomcille, W.R.; Goldhaber, D.; Swergold, G.D.; Mills, P.R.;
Proc. Natl. Acad. Sci. U.S.A. 88, 10926-10930, 1991
A>Title: Transmissible familial Creutzfeldt-Jakob disease associated with five, seven,
R:Reference number: I59184; MUID:92073400; PMID:1683708
A:Accession: I59184
A>Status: translated from GB/EMBL/DDBJ
A:Molecule type: DNA
A:Residues: 60-67 <GOL>
R:Cross-references: GB:S71208; NID:g239877; PIDN:AAZ0521.1; PID:g239878; GB:S71210; NIT
C:Genetics:
A:Gene: GDB:PRNP; CJD; PRIP
A:Cross-references: GDB:I20720; OMIM:176640; OMIM:137440
A:Map position: 20pter-20p12
A:Introns: #status absent
A>Note: one intron occurs before the initiator codon
C:Superfamily: major prion protein
C:Keywords: amyloid; blocked carboxyl end; brain; glycoprotein; lipoprotein; phosphatidy
F:1-22/Domain: signal sequence #status predicted <SIG>
F:23-230/Product: major prion protein #status predicted <MAT>
F:54-92/Region: 8-residue repeats (P-H-G-G-G-W-G-O)
F:112-134/Domain: transmembrane #status predicted <TM1>
F:231-253/Domain: carboxyl-terminal propeptide #status predicted <CTP>
F:1179-214/Dsulfide bonds: #status predicted
F:181,197/Binding site: carbonylate (Asn) (covalent) #status predicted
F:230/Modified site: GPI-anchor ethanolamine amidated carboxyl end (Ser) (in mature form

- Query Match 87.9%; Score 51; DB 1; Length 253;
Best Local Similarity 69.2%; Pred. No. 0.0056;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYYXPDXXXNQ 13
 ||||| | | | |
DB 160 QVYYRPMDXSNO 172

RESULT 11
137032
major prion protein precursor - gorilla
C:Species: Gorilla gorilla (gorilla)
C>Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change 13-Aug-1999
C:Accession: I37032
R:Cervenakova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Petrone, K.; Rubenstein, R.;
Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994
A>Title: Infectious amyloid precursor gene sequences in primates used for experimental
A:Reference number: I36907; MUID:95083661; PMID:7991600
A:Accession: I37032
A>Status: preliminary; translated from GB/EMBL/DDBJ
A:Molecule type: DNA
A:Residues: 1-253 <RES>
R:Cross-references: EMBL:U15166; NID:g563208; PIDN:AAA68633.1; PID:g563209
C:Superfamily: major prion protein

Query Match 87.9%; Score 51; DB 2; Length 253;
Best Local Similarity 69.2%; Pred. No. 0.0056;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYYXPDXXXNQ 13
 ||||| | | | |
DB 160 QVYYRPMDXSNO 172

RESULT 12
184423
major prion protein precursor - rhesus macaque
C:Species: Macaca mulatta (rhesus macaque)
C>Date: 24-May-1996 #sequence_revision 24-May-1996 #text_change 13-Aug-1999
C:Accession: I84423; S53622; S71054
R:Cervenakova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Petrone, K.; Rubenstein, R.;
Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994

```

A:Title: Infectious amyloid precursor gene sequences in primates used for experiments
A:Reference number: I36907; MUID:95083661; PMID:7991600
A:Accession: T84423
A:Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 1-253 <RES>
A:Cross-references: EMBL:U015163; NID:9595850; PIDN:AAA68635.1; PID:9595851
R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53622
A:Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-210, 'E', 212-253 <SCH>
A:Cross-references: EMBL:U08307
R:Schatzl, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71054
A:Reference number: S71041
A:Accession: S71054
A:Molecule type: DNA
A:Residues: 1-253 <SCH>
A:Cross-references: EMBL:U08307; NID:9474372; PIDN:AAC50095.1; PID:9474373
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane

Query Match      87.9%; Score 51; DB 2; Length 253;
Best Local Similarity 69.2%; Pred. No. 0.0056;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 OYVYXPDXXYXNQ 13
Dbs 160 QYVYRPVDSNQ 172

RESULT 13
553618
major prion protein - Colobus guereza
C:Species: Colobus guereza
C:Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 13-Aug-1999
C:Accession: S53618; S71046
R:Schaezel, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53618
A:Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-253 <SCH>
A:Cross-references: EMBL:U08297
R:Schatzl, H.M.
submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71046
A:Molecule type: DNA
A:Residues: 1-210, 'E', 212-253 <SCH>
A:Cross-references: EMBL:U08297; NID:9474352; PIDN:AAC50086.1; PID:9474353
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane

Query Match      87.9%; Score 51; DB 2; Length 253;
Best Local Similarity 69.2%; Pred. No. 0.0056;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 OYVYXPDXXYXNQ 13
Dbs 160 QYVYRPVDSNQ 172

RESULT 14
553619
major prion protein - Presbytis francoisi
C:Species: Presbytis francoisi

```

C:Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 13-Aug-1999
 C:Accession: S53619; S71057
 R:Schaetzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 J. Mol. Biol. 245, 362-374, 1995
 A:Title: Prion protein gene variation among primates.
 A:Reference number: S53614; MUID:95139066; PMID:7837269
 A:Accession: S53619
 A:Status: nucleic acid sequence not shown
 A:Molecule type: DNA
 A:Residues: 1-253 <SCH>
 A:Cross-references: EMBL:U08302
 R:Schaetzl, H.M.
 submitted to the EMBL Data Library, April 1994
 A:Reference number: S71041
 A:Accession: S71057
 A:Molecule type: DNA
 A:Residues: 1-210, 'E', 212-253 <SCW>
 A:Cross-references: EMBL:U08302; NID:q1396067; PIDN:AAB03105.1; PID:q1396068
 C:Superfamily: major prion protein
 C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane pro

Query Match 87.9%; Score 51; DB 2; Length 253;
 Best Local Similarity 69.2%; Pred. No. 0.0056;
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXPXDXYXNQ 13
 ||| | | | |
 DB 160 QVYRPVDOYSNQ 172

RESULT 15

S53620

major prion protein - hamadryas baboon

C:Species: Papio hamadryas (hamadryas baboon)

C:Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 13-Aug-1999

C:Accession: S53620; S71058

R:Schaetzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995

A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; MUID:95139066; PMID:7837269

A:Accession: S53620

A:Status: nucleic acid sequence not shown

A:Molecule type: DNA

A:Residues: 1-253 <SCH>

A:Cross-references: EMBL:U08294

R:Schaetzl, H.M.

submitted to the EMBL Data Library, April 1994

A:Reference number: S71041

A:Accession: S71058

A:Molecule type: DNA

A:Residues: 1-210, 'E', 212-253 <SCW>

A:Cross-references: EMBL:U08294; NID:q474346; PIDN:AAC50083.1; PID:q474347

C:Superfamily: major prion protein

C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane pro

Query Match 87.9%; Score 51; DB 2; Length 253;
 Best Local Similarity 69.2%; Pred. No. 0.0056;
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXPXDXYXNQ 13
 ||| | | | |
 DB 160 QVYRPVDOYSNQ 172

Search completed: March 24, 2003, 17:24:14
 Job time: 17.25 secs

10

11

12

13

14

GenCore version 5.1.4-p5-4578
Copyright (c) 1993 - 2003 Compugen Ltd.

OW protein - protein search, using sw model

Run on: March 24, 2003, 17:17:23 ; Search time 7.85417 seconds

(without alignments)
68.650 Million cell updates/sec

Title: US-09-508-828b-2

Sequence: 1 QVYXPDXKXNQ 13

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 112892 seqs, 41476328 residues

Total number of hits satisfying chosen parameters: 112892

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database: SwissProt_40:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match Length	ID	Description
1	51	87.9	238 1	PRIO_CERAT
2	51	87.9	238 1	PRIO_THEGE
3	51	87.9	239 1	PRIO_AOTTR
4	51	87.9	241 1	PRIO_CALMO
5	51	87.9	241 1	PRIO_CALMO
6	51	87.9	245 1	PRIO_CALMO
7	51	87.9	246 1	PRIO_CERAT
8	51	87.9	246 1	PRIO_CERAT
9	51	87.9	246 1	PRIO_CERAT
10	51	87.9	252 1	PRIO_CERAT
11	51	87.9	252 1	PRIO_CERAT
12	51	87.9	253 1	PRIO_CERAT
13	51	87.9	253 1	PRIO_CERAT
14	51	87.9	253 1	PRIO_CERAT
15	51	87.9	253 1	PRIO_CERAT
16	51	87.9	253 1	PRIO_CERAT
17	51	87.9	253 1	PRIO_CERAT
18	51	87.9	254 1	PRIO_CERAT
19	51	87.9	254 1	PRIO_CERAT
20	51	87.9	255 1	PRIO_CERAT
21	51	87.9	256 1	PRIO_CERAT
22	51	87.9	256 1	PRIO_CERAT
23	51	87.9	256 1	PRIO_CERAT
24	51	87.9	256 1	PRIO_CERAT
25	51	87.9	256 1	PRIO_CERAT
26	51	87.9	257 1	PRIO_CERAT
27	51	87.9	257 1	PRIO_CERAT
28	51	87.9	257 1	PRIO_CERAT
29	51	87.9	257 1	PRIO_CERAT
30	51	87.9	260 1	PRIO_CERAT
31	51	87.9	264 1	PRIO_CERAT
32	51	87.9	264 1	PRIO_CERAT
33	51	87.9	264 1	PRIO_CERAT

34	50	86.2	252 1	PRIO_CALMA	P40247 callithrix
35	50	86.2	254 1	PRIO_CRIGR	O60506 cricetus
36	50	86.2	254 1	PRIO_CRIMU	O60468 cricetus
37	50	86.2	254 1	PRIO_MESAU	P04273 mesocricetu
38	50	86.2	254 1	PRIO_SIGHT	O920t3 sigmodon hi
39	50	86.2	256 1	PRIO_CEREL	P79142 cervus elap
40	50	86.2	256 1	PRIO_ODOHE	P47852 odocoileus
41	46	79.3	253 1	PRIO_PANTR	P40253 pan troglod
42	42	72.4	255 1	PRIO_CANPA	O46501 canis famli
43	38	65.5	259 1	PRIO_TIRIVU	P51780 trichosurus
44	37	63.8	281 1	YE94_XYLEFA	O9p085 xylella fas
45	36	62.1	3898 1	POLG_HCVFA	P19712 hog cholera

ALIGNMENTS

RESULT 1
ID PRIO_CERAT STANDARD: PRT: 238 AA.
AC O95145; O95200;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).
GN PRNP.
OS Cercopithecus aethiops, and
OS Macaca sylvanus (Barbary ape).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecinae; Cercopithecus.
OX NCBI_TaxID=36222, 9546;
RN [1]
RP SEQUENCE FROM N. A.
RA der Kuyil A.C., Dekker J.T., Goudsmit J.;
RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE
CC HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.
CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED
CC "NODS".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME
CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.
CC
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
CC or send an email to license@sib-sib.ch).
CC
CC EMBL: U75384; AAB50623.1; -;
CC EMBL: U75382; AAB50629.1; -;
CC HSSP: P04925; IAG2.
CC InterPro: IPR000817; Prion.
CC Pfam: PF00377; Prion; 1.
CC SMART: SM00157; Prp; 1.
CC PROSITE: PS00291; Prion_1; 1.
CC PROSITE: PS00706; Prion_2; 1.
CC Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.
CC
CC NON_TER 1
CC SIGNAL 1
CC CHAIN 15
CC PROPEP 215
CC LIPID 215
CC DISULFID 215
CC CARBOHYD 166
CC CARBOHYD 182
CC
CC BY SIMILARITY.
CC MAJOR PRION PROTEIN.
CC REMOVED IN MATURE FORM (BY SIMILARITY).
CC GPI-ANCHOR (BY SIMILARITY).
CC BY SIMILARITY.
CC N-LINKED (GLCNAC. . .) (POTENTIAL).
CC N-LINKED (GLCNAC. . .) (POTENTIAL).
CC CARBOHYD 182

FT	DOMAIN	44	76	0.	4	X	8	AA	TANDEM	REPEATS	OF	P-H-G-G-G-W-G-
FT	REPEAT	44	52	1.								
FT	REPEAT	53	60	2.								
FT	REPEAT	61	68	3.								
FT	REPEAT	69	76	4.								
SO	SEQUENCE	238	AA;	26123	MM;	5F59A3EBC3E3531B	CXC64;					
Query Match				87.9%;	Score 51;	DB 1;	Length 238;					
Best Local				69.2%;	Pred. No. 0.002;							
Matches		9;	Conservative	0;	Mismatches	4;	Indels	0;	Gaps	0		

```
QY      1 QVYYPKPDYXNQ 13
          |||| | | | |
Db     145 QVYYPVDQYXNQ 157
```

RESULT 2			
PRIO_THEGE			
ID	PRIO_THEGE	STANDARD;	PRT; 238 AA.
NC	095270;		
DI	01-NOV-1997 (Rel. 35, Created)		
DT	01-NOV-1997 (Rel. 35, Last sequence update)		
DT	01-NOV-1997 (Rel. 35, Last annotation update)		
Major	prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment)		
GN	PrP OR PRP.		
OS	Theroplithecus galada (Galada baboon).		
OC	Eukaryotes; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;		
OC	Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;		
OC	Cercopithecoidea; Theroplithecus.		
NCBI_taxid=9565;			

CC RA der Kuyl A.C., Dekker J.T., Goudsmit J.:
CC Submitted (NOV-1996) to the EMBL/Genbank/DBJ databases.
CC
CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE
CC HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.
CC
CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED
CC "RODS".
CC
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC
CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASE KURU,
CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME
CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
CC
CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.
CC
CC -----
CC THIS SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/1sb-sib.ch>).
CC or send an email to license@1sb-sib.ch.

DR	EMBL; U75383; AAB50630.1; -.			
DR	HSSB; P04925; 1AG2.			
DR	InterPro; IPR000817; P1ron.			
DR	Pfam; PF00377; P1ron; 1.			
DR	SMART; SM00157; PRP; 1.			
DR	PROSITE; PS00291; P1ron_1; 1.			
DR	PROSITE; PS00706; P1ron_2; 1.			
KW	P1ron; Brain; Glycoprotein; Gpi-anchor; Repeat; Signal.			
FT	NON_TER	1	1	
FT	SIGNAL	<1	15	
FT	CHAIN	16	>238	
FT	DISULFID	164	199	
FT	CARBOHYD	166	166	
FT	CARBOHYD	182	182	
FT	DOMAIN	44	83	
FT				Q.
FT	REPEAT	44	52	
FT	REPEAT	53	60	
FT				1.
FT				2.

FT	REPEAT	61	68	3.
FT	REPEAT	69	76	4.
FT	NON_TER	238	238	
SO	SEQUENCE	238 AA;	26104 MW;	5F59BFF602243EDB CRC64;
Query Match		87.9%	Score 51;	DB 1;
Best Local	Similarity	69.2%	Pred. No.	0.002;
Matches	9;	Conservative	0;	Mismatches
			4;	Indels
			0;	Gaps
			0;	

```
QY      1 QVYYPXPDXXNQ 13
          |||| | | | |
Db     145 QVYYRPVDQYSNQ 157
```

RESULT 3			
PRIO_AOTTR	ID	PRIO_AOTTR	STANDARD:
AC	PA0245:		PRT: 239 AA.
DT	01-FEB-1995	(Rel. 31, Created)	
DT	01-FEB-1995	(Rel. 31, Last sequence update)	
DT	01-NOV-1995	(Rel. 32, Last annotation update)	
DE	Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment), PrNP.		
GN			
OS	Sus scrofa (Night monkey) (Dontouoculii).		
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;		
OC	Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Aotinae; Aotus.		
OX	NCBI_Taxid:9505;		
GN	(1)		

```

CC CC SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RA Schatzl H.M., Decostre M., Taylor L., Cohen F.E., Prusiner S.B.;
RT "Prion protein gene variation among primates.";
RL J. Mol. Biol. 245:362-374(1995).
CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE
CC HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.
CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED
CC "RODS".
CC
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASE KURU,
CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME
CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.
CC -----
CC THIS SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL Outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (see http://www.isdb-sib.ch/announce/
CC or send an email to license@isdb-sib.ch).

```

DR	EMBL:	U08293;	AAC50082.1;	-.
DR	HSSP:	P04925;	IAG2.	
DR	InterPro:	IPR000817;	Prion.	
DR	Ffam:	PF00377;	Prion.1.	
DR	SMART:	SM00157;	PRP; 1.	
DR	PROSITE:	PS00291;	PRION_1; 1.	
DR	PROSITE:	PS00706;	PRION_2; 1.	
KW	Prion:	Brain;	Glycoprotein; GPI-anchor; Repeat; Signal.	
FT	NON_TER	1	1	
FT	SIGNAL	<1	15	BY SIMILARITY.
FT	CHAIN	16	>239	MAJOR PRION PROTEIN.
FT	DISULFID	171	206	BY SIMILARITY.
FT	CARBOHYD	173	173	N-LINKED (GLCNAC...) (POTENTIAL).
FT	CARBOHYD	189	189	N-LINKED (GLCNAC...) (POTENTIAL).
FT	DOMAIN	44	83	5 X 8 AA TANDEM REPEATS OF P-H-G-G-W-G
FT				Q.
FT	REPEAT	44	51	1.
FT	REPEAT	52	59	1.
FT	REPEAT	60	67	2.
FT	REPEAT	68	75	3.
FT				4.

FT REPEAT 76 83 5.
 FT NON_TER 239
 SQ SEQUENCE 239 AA: 26246 MW: 2EFB77E354B7024A CRC64:

Query Match
 Best Local Similarity 69.2%; Pred. No. 0.002; DB 1; Length 239;
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXPKDXXYNQ 13
 DB 153 QVYRPVDQYSNQ 164

RESULT 4
 ID PRIO_CALMO STANDARD: PRT: 241 AA.

AC P40248;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 01-NOV-1995 (Rel. 32, Last annotation update)
 DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
 GN PRNP.
 OS Callithecus moloch (Dusky tit).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Callithecinae;
 OC Callithecus.
 OX NCBI_TaxID=9523;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=95139066; PubMed=7837269;
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
 RT "Prion protein gene variation among primates."
 RL J. Mol. Biol. 245:362-374(1995).
 CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE
 CC HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.
 CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED
 CC "RODS".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
 CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
 CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME
 CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
 CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.
 CC
 CC This SWISS-PROT entry is copyright. It is produced through a collaboration
 CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
 CC the European Bioinformatics Institute. There are no restrictions on its
 CC use by non-profit institutions as long as its content is in no way
 CC modified and this statement is not removed. Usage by and for commercial
 CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
 CC or send an email to license@isb-sib.ch)
 CC
 CC EMBL; U08312; AAC50100.1; -
 CC HSSP; P04925; IAG2.
 CC InterPro: IPR000817; Prion.
 CC Pfam: PF00377; prion. 1.
 CC SMART; SM00157; PrP. 1.
 CC PROSITE; PS00291; PRION_1; 1.
 CC PROSITE; PS00706; PRION_2; 1.
 KW Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.
 FT NON_TER 1 1
 FT SIGNAL <1 15
 FT CHAIN 16 >241
 FT PROPEP 224 207
 FT LIPID 223 207
 FT DISULFID 172 174
 FT CARBOHYD 174 174
 FT CARBOHYD 190 190
 FT DOMAIN 44 84
 FT
 FT REPEAT 44 52
 FT REPEAT 53 60
 FT REPEAT 61 68
 FT REPEAT 69 76

FT REPEAT 77 84 5.
 FT NON_TER 241 241
 SQ SEQUENCE 241 AA: 26373 MW: C6D2013EE7CAEC93 CRC64:

Query Match
 Best Local Similarity 69.2%; Pred. No. 0.002; DB 1; Length 241;
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXPKDXXYNQ 13
 DB 153 QVYRPVDQYSNQ 165

RESULT 5
 ID PRIO_MANSP STANDARD: PRT: 241 AA.

AC P40253;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 01-OCT-1996 (Rel. 34, Last annotation update)
 DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
 GN PRNP.
 OS Mandrillus sphinx (Mandrill) (Papio sphinx).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecoidea; Mandrillus.
 OX NCBI_TaxID=9561;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=95139066; PubMed=7837269;
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
 RT "Prion protein gene variation among primates."
 RL J. Mol. Biol. 245:362-374(1995).
 CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE
 CC HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.
 CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED
 CC "RODS".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
 CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
 CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME
 CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
 CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.
 CC
 CC This SWISS-PROT entry is copyright. It is produced through a collaboration
 CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
 CC the European Bioinformatics Institute. There are no restrictions on its
 CC use by non-profit institutions as long as its content is in no way
 CC modified and this statement is not removed. Usage by and for commercial
 CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
 CC or send an email to license@isb-sib.ch)
 CC
 CC EMBL; U08303; AAC50091.1; -
 CC HSSP; P04925; IAG2.
 CC InterPro: IPR000817; Prion.
 CC Pfam: PF00377; prion. 1.
 CC SMART; SM00157; PrP. 1.
 CC PROSITE; PS00291; PRION_1; 1.
 CC PROSITE; PS00706; PRION_2; 1.
 KW Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.
 FT NON_TER 1 1
 FT SIGNAL <1 15
 FT CHAIN 16 223
 FT PROPEP 224 >241
 FT LIPID 223 223
 FT DISULFID 172 207
 FT CARBOHYD 174 174
 FT CARBOHYD 190 190
 FT DOMAIN 44 84
 FT
 FT REPEAT 44 52
 FT REPEAT 53 60
 FT REPEAT 61 68
 FT REPEAT 69 76

FT REPEAT 61 68 3.
 FT REPEAT 69 76 4.
 FT REPEAT 77 84 5.
 FT NON_TER 241 241
 SQ SEQUENCE 241 AA: 26398 MW: E539D84E2E2B59DE CRC64;

Query Match
 Best Local Similarity 87.9%; Score 51; DB 1; Length 241;
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 QVYXPXDXYXNQ 13
 |||||
 Db 153 QVYRPVDOYSNQ 165

RESULT 6
 PRIO_CERAE STANDARD; PRT: 245 AA.

AC P40250;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 16-OCT-2001 (Rel. 40, Last annotation update)
 DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).
 GN PRNP.
 OS Cercopithecus aethiops (Green monkey) (Grivet), and
 OC Cercopithecus diana (Diana monkey).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecinae; Cercopithecus.
 NCBI_Taxid=9534, 36224;
 RX NCBI_Taxid=9534, 36224;
 RP SEQUENCE FROM N.A.
 RA MEDLINE-95139066; PubMed-7837269;
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
 RT *Prion protein gene variation among primates.*;
 RL J. Mol. Biol. 245:362-374(1995).

-1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE
 HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.
 -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED
 "RODS".

-1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
 ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
 CREATZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME
 (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
 TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.

-1- SIMILARITY: BELONGS TO THE PRION FAMILY.
 -1- SIMILARITY: BELONGS TO THE PRION FAMILY.

 CC This SWISS-PROT entry is copyright. It is produced through a collaboration
 CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
 CC the European Bioinformatics Institute. There are no restrictions on its
 CC use by non-profit institutions as long as its content is in no way
 CC modified and this statement is not removed. Usage by and for commercial
 CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
 CC or send an email to license@isb-sib.ch).

DR EMBL: U08291; AAC50080.1;
 DR EMBL: U08292; AAC50081.1;
 DR HSSP: P04925; IAG2.

DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; prion; 1.
 DR PRINTS: PR00341; PRION.
 DR SMART: SM00157; PRP; 1.
 DR PROSITE: PS00291; PRION_1; 1.
 DR PROSITE: PS00706; PRION_2; 1.
 KW Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.
 FT SIGNAL 1 22
 FT NON_TER 1 22
 FT CHAIN 23 222
 FT PROPEP 223 245
 FT LIPID 222 222
 FT DISULFID 222 206
 FT CARBOHYD 173 173
 FT CARBOHYD 169 169

N-LINKED (GLCNAC. . .) (POTENTIAL).
 N-LINKED (GLCNAC. . .) (POTENTIAL).

FT DOMAIN 51 83
 FT REPEAT 51 59 0.
 FT REPEAT 60 67 2.
 FT REPEAT 68 75 3.
 FT REPEAT 76 83 4.
 SQ SEQUENCE 245 AA: 26885 MW: D582B58E2726C99A CRC64;

Query Match
 Best Local Similarity 87.9%; Score 51; DB 1; Length 245;
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 QVYXPXDXYXNQ 13
 |||||
 Db 152 QVYRPVDOYSNQ 164

RESULT 7
 PRIO_CERMO STANDARD; PRT: 246 AA.

AC Q95172; Q95173;
 DT 01-NOV-1997 (Rel. 35, Created)
 DT 01-NOV-1997 (Rel. 35, Last sequence update)
 DT 15-JUL-1998 (Rel. 36, Last annotation update)
 DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
 GN PRNP.
 OS Cercopithecus mona, and
 OC Cercopithecus neglectus.
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecinae; Cercopithecus.
 NCBI_Taxid=36226, 36227;
 RX NCBI_Taxid=36226, 36227;
 RP SEQUENCE FROM N.A.
 RA der Kuyt A.C., Dekker J.T., Goudsmit J.;
 RL Submitted (NOV-1996) to the EMBL/Genbank/DBJ databases.

-1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE
 HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.
 -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED
 "RODS".

-1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
 ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
 CREATZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME
 (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
 TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.

-1- SIMILARITY: BELONGS TO THE PRION FAMILY.
 -1- SIMILARITY: BELONGS TO THE PRION FAMILY.

 CC This SWISS-PROT entry is copyright. It is produced through a collaboration
 CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
 CC the European Bioinformatics Institute. There are no restrictions on its
 CC use by non-profit institutions as long as its content is in no way
 CC modified and this statement is not removed. Usage by and for commercial
 CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
 CC or send an email to license@isb-sib.ch).

DR EMBL: U75386; AAB50625.1;
 DR EMBL: U75387; AAB50626.1;
 DR HSSP: P04925; IAG2.

DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; prion; 1.
 DR SMART: SM00157; PRP; 1.
 DR PROSITE: PS00291; PRION_1; 1.
 DR PROSITE: PS00706; PRION_2; 1.
 KW Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.
 FT SIGNAL 1 15
 FT NON_TER 1 15
 FT CHAIN 16 223
 FT PROPEP 224 246
 FT LIPID 223 223
 FT DISULFID 223 207
 FT CARBOHYD 174 174
 FT CARBOHYD 190 190

N-LINKED (GLCNAC. . .) (POTENTIAL).
 N-LINKED (GLCNAC. . .) (POTENTIAL).

FT DOMAIN 44 84 5 X 8 AA TANDEM REPEATS OF P-H-G-G-W-G-
 FT REPEAT 44 52 0.
 FT REPEAT 1. 1.
 FT REPEAT 53 60 2.
 FT REPEAT 61 68 3.
 FT REPEAT 69 76 4.
 FT REPEAT 77 84 5.
 SQ SEQUENCE 246 AA: 26900 MW: 835D147CA2B4FDD3 CRC64;
 Query Match 87.9%; Score 51; DB 1; Length 246;
 Best Local Similarity 69.2%; Pred. No. 0.0021;
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 Oy 1 QVYXXPDXXNQ 13
 |||||
 Db 153 QVYRPVDOYSNQ 165

RESULT 8
 Prio_CERPA STANDARD; PRT; 246 AA.
 ID Prio_CERPA 095174;
 AC 01-NOV-1997 (Rel. 35, Created)
 DT 01-NOV-1997 (Rel. 35, Last sequence update)
 DT 01-NOV-1997 (Rel. 35, Last annotation update)
 DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).
 GN PRNP.
 OS Cercopithecus patas.
 OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecinae; Cercopithecus.
 OX NCBI_TaxID=27677;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA der Kuyt A.C., Dekker J.T., Goudsmit J.;
 RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE
 CC HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.
 CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED
 CC "RODS".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
 CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
 CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME
 CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
 CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.
 CC -----
 CC This SWISS-PROT entry is copyright. It is produced through a collaboration
 CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
 CC the European Bioinformatics Institute. There are no restrictions on its
 CC use by non-profit institutions as long as its content is in no way
 CC modified and this statement is not removed. Usage by and for commercial
 CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
 CC or send an email to license@sib-sib.ch).
 CC -----
 CC EMBL: U75388; AAB50627.1; -
 CC HSSP: P04925; IAG2.
 CC InterPro: IPR000817; Prion.
 CC Pfam: PF00377; Prion; 1.
 CC SMART: SM00157; Prp; 1.
 CC PROSITE: PS00291; PRION_1; 1.
 CC PROSITE: PS00706; PRION_2; 1.
 CC Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.
 KW NON_TER 1
 FT SIGNAL <1 15
 FT CHAIN 16 223
 FT PROPEP 224 246
 FT LIPID 223 223
 FT DISULFID 172 207
 FT CARBOHYD 174 174
 FT CARBOHYD 190 190
 FT DOMAIN 44 84
 5 X 8 AA TANDEM REPEATS OF P-H-G-G-W-G-
 O.

FT REPEAT 44 52 0.
 FT REPEAT 1. 1.
 FT REPEAT 53 60 2.
 FT REPEAT 61 68 3.
 FT REPEAT 69 76 4.
 FT REPEAT 77 84 5.
 SQ SEQUENCE 246 AA: 26886 MW: D35D105B8EC53108 CRC64;
 Query Match 87.9%; Score 51; DB 1; Length 246;
 Best Local Similarity 69.2%; Pred. No. 0.0021;
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 Oy 1 QVYXXPDXXNQ 13
 |||||
 Db 153 QVYRPVDOYSNQ 165

RESULT 9
 Prio_CERTO STANDARD; PRT; 246 AA.
 ID Prio_CERTO 095176;
 AC 01-NOV-1997 (Rel. 35, Created)
 DT 01-NOV-1997 (Rel. 35, Last sequence update)
 DT 01-NOV-1997 (Rel. 35, Last annotation update)
 DE Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C) (Fragment).
 GN PRNP.
 OS Cercopithecus torquatus atys (Red-crowned mangabey) (Sooty mangabey).
 OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecinae; Cercopithecus.
 OX NCBI_TaxID=9531;
 RN [1]
 RP SEQUENCE FROM N.A.
 RA der Kuyt A.C., Dekker J.T., Goudsmit J.;
 RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE
 CC HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.
 CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED
 CC "RODS".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
 CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
 CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME
 CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
 CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.
 CC -----
 CC This SWISS-PROT entry is copyright. It is produced through a collaboration
 CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
 CC the European Bioinformatics Institute. There are no restrictions on its
 CC use by non-profit institutions as long as its content is in no way
 CC modified and this statement is not removed. Usage by and for commercial
 CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
 CC or send an email to license@sib-sib.ch).
 CC -----
 CC EMBL: U75385; AAB50628.1; -
 CC HSSP: P04925; IAG2.
 CC InterPro: IPR000817; Prion.
 CC Pfam: PF00377; Prion; 1.
 CC SMART: SM00157; Prp; 1.
 CC PROSITE: PS00291; PRION_1; 1.
 CC PROSITE: PS00706; PRION_2; 1.
 CC Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.
 KW NON_TER 1
 FT SIGNAL <1 15
 FT CHAIN 16 223
 FT PROPEP 224 246
 FT LIPID 223 223
 FT DISULFID 172 207
 FT CARBOHYD 174 174
 FT CARBOHYD 190 190
 FT DOMAIN 44 84
 5 X 8 AA TANDEM REPEATS OF P-H-G-G-W-G-
 O.

FT	REPEAT	44	52	1.
FT	REPEAT	53	60	2.
FT	REPEAT	61	68	3.
FT	REPEAT	69	76	4.
FT	REPEAT	77	84	5.
5Q	SEQUENCE	246 AA;	26914 MM;	F58679CBBBC5AD C7 CRC64,

Query Match	87.98;	Score 51;	DB 1;	Length 246;
Best Local Similarity	69.28;	Pred. No. 0.0021;		
Matches	9;	Conservative	0;	Mismatches 4;
			Indels	0;
			Gaps	0;

```
Qy 1 QVYYPXDXYXNQ 13
    |||| | | | |
Db 153 QVYYPVDQYSNQ 16
```

RESULT 10	ID	PRIOT_CEBAP	STANDARD;	PRT;	252 AA.
AC	PRIOT_CEBAP P40249;				
DT	01-FEB-1995 (Rel. 31, Created)				
DT	01-FEB-1995 (Rel. 31, Last sequence update)				
DT	01-OCT-1996 (Rel. 34, Last annotation update)				
DE	Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).				
GN	PrP.				
OS	Cebus apella (Brown-capped capuchin).				
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;				
OC	Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Cebinae; Cebus.				
OX	NCBI_Taxid=9515;				
'RN	[1]				
RP	SEQUENCE FROM N.A.				
RX	MEDLINE=95139066; PubMed=7837269;				
RA	Schatz H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;				
RT	"Prion protein gene variation among primates."				
RL	J. Mol. Biol. 245:362-374(1995).				
CC	-1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE				
CC	HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.				
CC	-1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED				
CC	"RODS".				
CC	-1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.				
CC	-1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND				
CC	ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,				
CC	CRUZFELD-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME				
CC	(GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),				
CC	TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.				
CC	-1- SIMILARITY: BELONGS TO THE PRION FAMILY.				
CC	-----				
CC	This SWISS-PROT entry is copyright. It is produced through a collaboration				
CC	between the Swiss Institute of Bioinformatics and the EMBL outstation				
CC	at the European Bioinformatics Institute. There are no restrictions on ways				
CC	use by non-profit institutions as long as its content is in no way				
CC	modified and this statement is not removed. Usage by and for commercial				
CC	entities requires a license agreement (See http://www.isb-sib.ch/announce				
CC	or send an email to license@isb-sib.ch).				
CC	-----				
CC	EMBL; U08295; AAC50084.1; -.				
DR	HSSP; P04156; 1E1G.				
DR	InterPro: IPR000817; Prion.				
DR	Pfam: PF00377; prion.1.				
DR	PRINTS; PR00341; PRION.				
DR	SMART; SM00157; PRP; 1.				
DR	PROSITE; PS00291; PRION_1; 1.				
DR	PROSITE; PS00706; PRION_2; 1.				
FW	Prion; Brain; Glycoprotein; GPI-anchor; Repeat; signal.				
KW	SIGNAL				
FT	CHAIN	1	22		
FT	PROPEP	23	229		
FT	LIPID	229	252		
FT	DISULFID	178	213		
FT	CARBOHYD	180	196		
FT	CARBOHYD	196	196		
FT	DOMAIN	51	90		
FT					

FT	REPEAT	51	58	1.
FT	REPEAT	59	66	2.
FT	REPEAT	67	74	3.
FT	REPEAT	75	82	4.
FT	REPEAT	83	90	5.
SO	SEQUENCE	252 AA;	27579 MM;	A2DFCA0AD26D7821 CRC64

Query Match	87.9%	Score 51	DB 1	Length 252
Best local Similarity	69.2%	Pred. No. 0.0021		
Matches 9	Conservative 0	Mismatches 4	Indels 0	Gaps 0

```

QY      1 QVYYPXPDXNNQ 13
          ||| | | |
Db     159 QVYYRPVDQYSNQ 171

```

ID	PRIOR	RABIT	STANDARD	PRT	252 AA
AC	095211				
DT	01-NOV-1997	(Rel. 35, Created)			
DT	01-NOV-1997	(Rel. 35, Last sequence update)			
DT	01-NOV-1997	(Rel. 35, Last annotation update)			
DE	Major prion protein precursor (PrP)	(PrP27-30) (PrP33-35c).			
GN	PrNP OR PrP.				
OS	Oryctolagus cuniculus (Rabbit).				
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;				
OC	Mammalia; Eutheria; Lagomorpha; Leporidae; Oryctolagus.				
RN	NCBI_taxid=9986;				
RX	[1]				
RP	SEQUENCE FROM N.A.				
RC	STRAIN-New zealand white;				
RC	MEDLINE=9718365; PubMed=9031631;				
RA	Loftus B., Rogers M.;				
RT	"Characterization of a prion protein (PrP) gene from rabbit; a				
RL	species with apparent resistance to infection by prions.";				
RL	Gene 184:215-219(1997).				
CC	-1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE				
CC	HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.				
CC	-1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED				
CC	"RODS".				
CC	-1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.				
CC	-1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND				
CC	ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,				
CC	CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME				
CC	(GSS), SCAPAE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),				
CC	TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.				
CC	-1- SIMILARITY: BELONGS TO THE PRION FAMILY.				
CC	-----				
CC	THIS SWISS-PROT entry is copyright. It is produced through a collaboration				
CC	between the Swiss Institute of Bioinformatics and the EMBL outstation				
CC	at the European Bioinformatics Institute. There are no restrictions on its				
CC	use by non-profit institutions as long as its content is in no way				
CC	modified and this statement is not removed. Usage by and for commercial				
CC	entities requires a license agreement (See http://www.isb-sib.ch/announce				
CC	or send an email to license@isb-sib.ch).				
CC	-----				
DR	EMBL; U28334; AAC48697.1; .				
DR	HSSP; P10279; IDWY.				
DR	InterPro: IPR000817; prion.				
DR	Pfam; PF00377; prion; 1.				
DR	PRINTS; PR00341; PRION.				
DR	SMART; SM00157; PRP; 1.				
DR	PROSITE; PS00291; PRION_1; 1.				
DR	PROSITE; PS00706; PRION_2; 1.				
KW	Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.				
FT	SIGNAL	1	28		
FT	CHAIN	29	252		
FT	CAROHYD	180			
FT	CAROHYD	196			
FT	DISULFID	178	213		
FT	DOMAIN	51	92		
FT					

```

FT REPEAT 51 59 1.
FT REPEAT 60 67 2.
FT REPEAT 68 75 3.
FT REPEAT 76 83 4.
FT REPEAT 84 92 5.
SO SEQUENCE 252 AA; 27432 MW; 2E177AAAF38B23A54 CRC64;

Query Match
Best Local Similarity 87.9%; Score 51; DB 1; Length 252;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXPXDXKXNM 13
DB 159 QVYRPVDPYSNQ 171

RESULT 12
PRIO_COLGU STANDARD; PRT; 253 AA.
AC P40251;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 16-OCT-2001 (Rel. 40, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).
CN PRNP.
OS Colobus guereza (Black-and-white colobus monkey).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea; Colobinae;
OC Colobus.
OX NCBI_TaxID=33548;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RX Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT J. Mol. Biol. 245:362-374(1995).
RL [2]
RN SEQUENCE OF 8-253 FROM N.A.
RA der Kuyl A.C., Dekker J.T., Goudsmit J.;
RL Submitted (Oct-1996) to the EMBL/GenBank/DBJ databases.
CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
CC CRUZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME
CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.
CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).
CC -----
CC EMBL; U08397; AAC50086.1; -
CC EMBL; U75389; AAB50624.1; -
CC HSSP; P04925; IAG2.
CC InterPro: IPR000817; Prion.
CC Pfam: PF00377; prion; 1.
CC PRINTS: PR00341; PRION.
CC SMART: SM00157; PRP; 1.
CC PROSITE: PS00291; PRION_1; 1.
CC PROSITE: PS00706; PRION_2; 1.
CC Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.
CC SIGNAL
CC CHAIN 1 22
CC SIGNAL 23 230
CC PROPEP 231 253
CC REMOVED IN MATURE FORM (BY SIMILARITY).

```

```

FT LIPID 230 230 GPI-ANCHOR (BY SIMILARITY).
FT DISULFID 179 214 BY SIMILARITY.
FT CARBOHYD 181 181 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT CARBOHYD 197 197 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT DOMAIN 51 91 5 X 8 AA TANDEM REPEATS OF P-H-G-G-W-G-
FT REPEAT 51 59 1.
FT REPEAT 60 67 2.
FT REPEAT 68 75 3.
FT REPEAT 76 83 4.
FT REPEAT 84 91 5.
SO SEQUENCE 253 AA; 27626 MW; 14B174778B1F5316 CRC64;

Query Match
Best Local Similarity 87.9%; Score 51; DB 1; Length 253;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXPXDXKXNM 13
DB 160 QVYRPVDPYSNQ 172

RESULT 13
PRIO_GORGO STANDARD; PRT; 253 AA.
AC P40252; Q28419;
DT 01-FEB-1995 (Rel. 31, Created)
DT 01-FEB-1995 (Rel. 31, Last sequence update)
DT 15-JUL-1998 (Rel. 36, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).
CN PRNP.
OS Gorilla gorilla gorilla (Lowland gorilla).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Hominoidea; Gorilla.
OX NCBI_TaxID=9595;
RN [1]
RP SEQUENCE FROM N.A.
RX MEDLINE=95139066; PubMed=7837269;
RX Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;
RT J. Mol. Biol. 245:362-374(1995).
RL [2]
RN SEQUENCE FROM N.A.
RP TISSUE=Blood;
RX MEDLINE=95083661; PubMed=7991600;
RX Cervenakova L., Brown P., Goldfarb L.G., Nagle J., Petrone R.,
RX Rubenstein R., Dubnick M., Gibbs C.J., Galjusek D.C.;
RT "Infectious amyloid precursor gene sequences in primates used for
RT experimental transmission of human spongiform encephalopathy.";
RL Proc. Natl. Acad. Sci. U.S.A. 91:12159-12162(1994).
CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE
CC HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.
CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED
CC "RODS".
CC -----
CC This SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).
CC -----
CC EMBL; U08300; AAC50089.1; -
CC EMBL; U15166; AAB68633.1; -
CC HSSP; P04156; IOL2.

```

DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; prion.1.
 DR PRINTS: PR00341; PRION.
 DR SMART: SM00157; PRP.1.
 DR PROSITE: PS00291; PRION.1; 1.
 DR PROSITE: PS00706; PRION.2; 1.
 DR prion; Brain; Glycoprotein; GPI-anchor; Repeat; signal.
 FT SIGNAL 1 22
 FT CHAIN 23 230
 FT PROPEP 231 253
 FT LIPID 230 230
 FT DISULFID 179 214
 FT CARBOHYD 181 181
 FT CARBOHYD 157 157
 FT DOMAIN 51 91
 FT REPEAT 51 59
 FT REPEAT 60 67
 FT REPEAT 68 75
 FT REPEAT 76 83
 FT REPEAT 84 91
 FT CONFLICT 6 6
 FT SEQUENCE 253 AA; 27660 MW; E28F4C3FAACA6E CRC64;
 Query Match 87.9%; Score 51; DB 1; Length 253;
 Best Local Similarity 69.2%; Pred. No. 0.0021;
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 1 QVYXXPXDXXXND 13
 Db 160 QVYRPMQYRSMO 172
 RESULT 14
 ID PRIO_HUMAN STANDARD; PRT; 253 AA.
 AC P04156;
 DT 01-NOV-1986 (Rel. 03, Created)
 DT 01-NOV-1986 (Rel. 03, Last sequence update)
 DT 15-JUN-2002 (Rel. 41, Last annotation update)
 DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (ASCR)
 DE (CD230 antigen).
 DE PRNP.
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Homiidae; Homo.
 OX NCBI_TaxID=9606;
 RN 11
 RP SEQUENCE FROM N.A.
 RX MEDLINE=86300093; PubMed=3755672;
 RX Kretzschmar H.A., Stowring L.E., Westaway D., Stubblebine W.H.,
 RA Prusiner S.B., Dearmond S.J.;
 RT "Molecular cloning of a human prion protein cDNA";
 RL DNA 5:315-324(1986).
 RN 121
 RP SEQUENCE FROM N.A.
 RX MEDLINE=21638749; PubMed=11780052;
 RX Deloukas P., Matthews L.H., Ashurst J., Burton J., Gilbert J.G.R.,
 RA Jones M., Stavrides G., Almeida J.P., Babbage A.K., Bagulay C.L.,
 RA Bailey J., Barlow K.F., Bates K.N., Beard L.M., Beare D.M.,
 RA Beasley O.P., Bird C.P., Blakey S.E., Bridgeman A.M., Brown A.J.,
 RA Buck D., Burrill W.D., Butler A.P., Carder C., Carter N.P.,
 RA Chapman J.C., Clamp M., Clark G., Clark L.N., Clark S.Y., Clee C.M.,
 RA Clegg S., Cobley V.E., Collier R.E., Connor R.E., Corby N.R.,
 RA Coloson A., Coville G.J., Deelman R., Dhani P.D., Dunn M.,
 RA Ellington A.G., Frankland J.A., Fraser A., French L., Garner P.,
 RA Graffam D.V., Griffiths C., Griffiths M.N.D., Gilliam R., Hall R.E.,
 RA Hammond S., Harley J.L., Heath P.D., Ho S., Holden J.L., Howden P.J.,
 RA Huckle E., Hunt A.R., Hunt S.E., Jekosch K., Johnson C.M., Johnson D.,
 RA Kay M.P., Kimberley A.M., King A., Knights A., Laird G.K., Lawlor S.,
 RA Lehnvasala M.H., Leversha M.A., Lloyd C., Lloyd D.M., Lovell J.D.,
 RA Marsh V.L., Martin S.L., McConachie L.J., McKay K., McMuray A.A.,
 RA Milne S.A., Mistry D., Moore M.J.F., Mullikin J.C., Nickerson T.,

RA Oliver K., Parker A., Patel R., Pearce T.A.V., Peck A.I.,
 RA Philimore B.J.C.T., Prathalingam S.R., Plumb R.W., Ramsay H.,
 RA Rice C.M., Ross M.T., Scott C.E., Sehra H.K., Showkneen R., Sims S.,
 RA Stuce C.D., Smith M.L., Soderlund C., Steward C.A., Stuckon J.E.,
 RA Swann R.M., Symamore N., Taylor R., Tee L., Thomas D.W., Thorpe A.,
 RA Tracey A., Tromans A.C., Vaudin M., Wall M., Wallis J.M.,
 RA Whitehead S.L., Whitaker P., Willey D.L., Williams L., Williams S.A.,
 RA Wilming L., Wray P.W., Hubbard T., Durbin R.M., Bentley D.R., Beck S.,
 RA Rogers J.;
 RT "The DNA sequence and comparative analysis of human chromosome 20";
 RL Nature 414:665-671(2001).
 RN 13
 RP SEQUENCE OF 8-253 FROM N.A.
 RX MEDLINE=86261778; PubMed=3014653;
 RA Liao Y.-C.J., Iebo R.V., Clawson G.A., Smuckler E.A.;
 RT "Human prion protein cDNA: molecular cloning, chromosomal mapping,
 and biological implications";
 RL Science 233:364-367(1986).
 RN 14
 RP SEQUENCE OF 58-85 AND 111-150 (VARIANT AMYLOID GSS).
 RX MEDLINE=91160504; PubMed=1672107;
 RA Tagliavini F., Prelli F., Ghiso J., Bugiani O., Serban D.,
 RA Prusiner S.B., Barlow M.R., Ghetti B., Frangione B.;
 RT "Amyloid protein of Gerstmann-Strausler-Scheinker disease (Indiana
 kindred) is an 11 kd fragment of prion protein with an N-terminal
 glycine at codon 58";
 RL EMBO J. 10:513-519(1991).
 RN 15
 RP STRUCTURE BY NMR OF 23-230.
 RX MEDLINE=20087216; PubMed=10618385;
 RA Zahn R., Liu A., Luhrs T., Riek R., von Schroetter C.,
 RA Lopez Garcia F., Billerter M., Calzolari L., Wider G., Wuthrich K.;
 RT "NMR solution structure of the human prion protein";
 RL Proc. Natl. Acad. Sci. U.S.A. 97:145-150(2000).
 RN 16
 RP STRUCTURE BY NMR OF 118-221.
 RX MEDLINE=20359708; PubMed=10900000;
 RA Calzolari L., Lysek D.A., Guntert P., von Schroetter C., Riek R.,
 RA Zahn R., Wuthrich K.;
 RT "NMR structures of three single-residue variants of the human prion
 protein";
 RL Proc. Natl. Acad. Sci. U.S.A. 97:8340-8345(2000).
 RN 17
 RP REVIEW ON VARIANTS.
 RX MEDLINE=93372867; PubMed=8364585;
 RA Palmer M.S., Collinge J.;
 RT "Mutations and polymorphisms in the prion protein gene";
 RL Hum. Mutat. 2:168-173(1993).
 RN 18
 RP REVIEW ON VARIANTS.
 RX MEDLINE=94029646; PubMed=8105771;
 RA Prusiner S.B.;
 RT "Genetic and infectious prion diseases";
 RL Arch. Neurol. 50:1129-1135(1993).
 RN 19
 RP VARIANT GSS LEU-102.
 RX MEDLINE=89159432; PubMed=2564168;
 RA Hsiao K., Baker H.F., Crow T.J., Poulter M., Owen F.,
 RA Terwilliger J.D., Westaway D., Ott J., Prusiner S.B.;
 RT "Linkage of a prion protein missense variant to Gerstmann-Strausler
 syndrome";
 RL Nature 338:342-345(1989).
 RN 110
 RP VARIANTS LEU-102; VAL-117 AND VAL-129.
 RX MEDLINE=89392018; PubMed=2783132;
 RA Don-Or K., Tateishi J., Sasaki H., Kitamoto T., Sakaki Y.;
 RT "Pro-leu change at position 102 of prion protein is the most
 common but not the sole mutation related to Gerstmann-Strausler
 syndrome";
 RL Biochem. Biophys. Res. Commun. 163:974-979(1989).
 RN 111
 RP VARIANT PFT ASN-178.
 RX MEDLINE=92195483; PubMed=1347910;

RA Medori R., Montagna P., Tritschler H.J., Leblanc A., Cortelli P.,
 RA Tinuper P., Lugaresi E., Gambetti P.,
 RA "Fetal familial insomnia: a second kindred with mutation of prion
 RT protein gene at codon 178.",
 RL Neurology 42:669-670(1992).
 [12]
 RA VARIANT CJD ASN-178.
 RX MEDLINE-91124933; PubMed-16711440;
 RA Goldfarb L.G., Haltia M., Brown P., Nieto A., Kovanen J.,
 RA McCombe W.R., Trapp S., Gajdusek D.C.,
 RA "New mutation in scrapie amyloid precursor gene (at codon 178) in
 RT Finnish Creutzfeldt-Jakob kindred.",
 RL Lancet 337:425-425(1991).
 [13]
 RA VARIANT CJD LYS-200.
 RX MEDLINE-90355709; PubMed-1975028;
 RA Goldfarb L., Mitrova E., Brown P., Toh B.K., Gajdusek D.C.,
 RA "Mutation in codon 200 of scrapie amyloid protein gene in two clusters
 RT of Creutzfeldt-Jakob disease in Slovakia.",
 RL Lancet 336:514-515(1990).
 [14]
 RA VARIANT GSS ARG-217.
 RX MEDLINE-93350977; PubMed-1363810;
 RA Hsiao K., Dlouhy S.R., Farlow M.R., Cass C., da Costa M.,
 RA Conneally P.M., Hodes M.E., Ghetti B., Prusiner S.B.,
 RA "Mutant prion proteins in Gerstmann-Strausler-Scheinker disease with
 RT neurofibrillary tangles.",
 RL Nat. Genet. 1:68-71(1992).
 [15]
 RA VARIANT CJD ILE-180 AND ARG-232.
 RX MEDLINE-9323314; PubMed-8461023;
 RA Kitamoto T., Ohta M., Doh-ura K., Htoshhi S., Terao Y., Tateishi J.,
 RA "Novel missense variants of prion protein in Creutzfeldt-Jakob
 RT disease or Gerstmann-Strausler-Scheinker syndrome.",
 RL Biochem. Biophys. Res. Commun. 191:709-714(1993).
 [16]
 RA VARIANT CJD ILE-210.
 RX MEDLINE-94071412; PubMed-7902693;
 RA Pocchiarri M., Salvatore M., Cutruzzola F., Genuardi M.,
 RA Allicelli C.T., Masullo C., Macchi G., Alena G., Galgani S., Xi Y.C.,
 RA Pettroni R., Silvestrini M.C., Brunori M.,
 RA "A new point mutation of the prion protein gene in Creutzfeldt-Jakob
 RT disease.",
 RL Ann. Neurol. 34:802-807(1993).
 [17]
 RA VARIANT GSS LEU-105.
 RX MEDLINE-94077414; PubMed-7902972;
 RA Yamada M., Itoh Y., Fujigasaki H., Naruse S., Kaneko K., Kitamoto T.,
 RA Tateishi J., Ohtomo E., Hayakawa M., Tanaka J., Matsushita M.,
 RA Miyake T.,
 RA "A missense mutation at codon 105 with codon 129 polymorphism of the
 RT prion protein gene in a new variant of Gerstmann-Strausler-Scheinker
 RL disease.",
 RL Neurology 43:2723-2724(1993).
 [18]
 RA VARIANT GSS LEU-105.
 RX MEDLINE-95213742; PubMed-7699395;
 RA Itoh Y., Yamada M., Hayakawa M., Shozawa T., Tanaka J., Matsushita M.,
 RA "A variant of Gerstmann-Strausler-Scheinker disease carrying codon
 RT 105 mutation with codon 129 polymorphism of the prion protein gene: a
 RL clinicopathological study.",
 RL J. Neurol. Sci. 127:77-86(1994).
 [19]
 RA VARIANT CJD LYS-200.
 RX MEDLINE-94142912; PubMed-7906019;
 RA Inoue I., Kitamoto T., Doh-ura K., Shii H., Goto I., Tateishi J.,
 RA "Japanese family with Creutzfeldt-Jakob disease with codon 200 point
 RT mutation of the prion protein gene.",
 RL Neurology 44:299-301(1994).
 [20]
 RA VARIANT CJD LYS-200.
 RX MEDLINE-94316708; PubMed-7913755;

RA Gabizon R., Rosenman H., Weiner Z., Kahana I., Kahana E., Shugart Y.,
 RA Ott J., Prusiner S.B.,
 RA "Mutation in codon 200 and polymorphism in codon 129 of the prion
 RT protein gene in Libyan Jews with Creutzfeldt-Jakob disease.",
 RL Philos. Trans. R. Soc. Lond., B, Biol. Sci. 343:385-390(1994).
 [21]
 RA VARIANT GSS LEU-102.
 RX MEDLINE-95303274; PubMed-7783876;
 RA Young K., Jones C.K., Piccardo P., Lazzarini A., Golbe L.I.,
 RA Zimmerman T.R., Dickson D.W., McClachlan D.C., St George-Hyslop P.H.,
 RA Lemnox A.,
 RA "Gerstmann-Strausler-Scheinker disease with mutation at codon 102
 RT and methionine at codon 129 of PRNP in previously unreported
 RT patients.",
 RL Neurology 45:1127-1134(1995).
 [22]
 Query Match 87.9%; Score 51; DB 1; Length 253;
 Best Local Similarity 69.2%; Pred. No. 0.0021;
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 1 QVYXPDXYYXNQ 13
 Db 160 QVYRPMDEXNQ 172
 RESULT 15
 ID PRIO_MACFA STANDARD; PRT; 253 AA.
 AC P40254;
 DT 01-FEB-1995 (Rel. 31, Created)
 DT 01-FEB-1995 (Rel. 31, Last sequence update)
 DT 01-OCT-1996 (Rel. 34, Last annotation update)
 DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).
 GN PRNP.
 OS Macaca fascicularis (Crab eating macaque) (Cynomolgus monkey),
 OS Macaca arctoides (Stump-tailed macaque),
 OS Macaca fuscata fuscata (Japanese macaque),
 OS Macaca mulatta (Rhesus macaque),
 OS Macaca nemestrina (Pig-tailed macaque), and
 OS Papio hamadryas (Hamadryas baboon).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrate; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
 OC Cercopithecoinae; Macaca.
 OC NCBI_TaxID=9541, 9540, 9543, 9544, 9545, 9557;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE-95139066; PubMed-7837269;
 RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.,
 RT "Prion protein gene variation among primates.",
 RL J. Mol. Biol. 245:362-374(1995).
 [2]
 RN SEQUENCE FROM N.A.
 RP SPECIES-M.mulatta; TISSUE-Brain;
 RX MEDLINE-95083661; PubMed-7991600;
 RA Cervenakova L., Brown P., Goldfarb L.G., Gajdusek D.C.,
 RA Rubenstein R., Dubrion M., Gibbs C.J., Gajdusek D.C.,
 RA "Infectious amyloid precursor gene sequences in primates used for
 RT experimental transmission of human spongiform encephalopathy.",
 RL Proc. Natl. Acad. Sci. U.S.A. 91:12159-12162(1994).
 CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE
 CC HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.
 CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED
 CC "RODS".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
 CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES Kuru,
 CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSLER SYNDROME
 CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
 CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.
 CC
 CC This SWISS-PROT entry is copyright. It is produced through a collaboration

CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
 CC the European Bioinformatics Institute. There are no restrictions on its
 CC use by non-profit institutions as long as its content is in no way
 CC modified and this statement is not removed. Usage by and for commercial
 CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
 CC or send an email to license@isb-sib.ch).

DR EMBL; 008398; AAC50087.1; -
 DR EMBL; 008311; AAC50099.1; -
 DR EMBL; 008301; AAC50090.1; -
 DR EMBL; 008307; AAC50095.1; -
 DR EMBL; 008306; AAC50094.1; -
 DR EMBL; 008294; AAC50083.1; -
 DR EMBL; 015163; AAA68635.1; -
 DR HSSP; P04925; 1AG2.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; Prion; 1.
 DR PRINTS; PR00341; PRION.
 DR SMART; SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 KW Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.
 FT SIGNAL 1 22
 FT CHAIN 23 230
 FT PROPEP 231 253
 FT LIPID 230 230
 FT DISULFID 179 214
 FT CARBOHYD 181 181
 FT CARBOHYD 197 197
 FT DOMAIN 51 91
 FT REPEAT 51 59
 FT REPEAT 60 67
 FT REPEAT 68 75
 FT REPEAT 76 83
 FT REPEAT 84 91
 FT REPEAT 91 91
 SO SEQUENCE 253 AA; 27676 MW; F01D5EA64AB68C31 CRC64;
 Query Match 87.9%; Score 51; DB 1; Length 253;
 Best Local Similarity 69.2%; Pred. No. 0.0021;
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXXPDXYXNQ 13
 |||||
 DB 160 QVYRPVDQYSNQ 172

Search completed: March 24, 2003, 17:20:17
 Job time : 7.85417 secs

GenCore version 5.1.4-p5-4578
Copyright (c) 1993 - 2003 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: March 24, 2003, 17:19:46 ; Search time 28.4375 Seconds

(without alignments)
94.193 Million cell updates/sec

Title: US-09-508-828b-2

Perfect score: 58

Sequence: 1 QVYKPPDXNNQ 13

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 671580 seqs, 206047115 residues

Total number of hits satisfying chosen parameters: 671580

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database :

1: SP_ARCHAEA:*
2: SP_BACTERIA:*
3: SP_FUNGI:*
4: SP_HUMAN:*
5: SP_INVERTEBRATE:*
6: SP_MAMMAL:*
7: SP_MHC:*
8: SP_ORGANELLE:*
9: SP_PHAGE:*
10: SP_PLANT:*
11: SP RODENT:*
12: SP_VIRUS:*
13: SP_VERTEBRATE:*
14: SP_UNCLASSIFIED:*
15: SP_VIRUS:*
16: SP_BACTERIAP:*
17: SP_ARCHAEP:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	51	87.9	124	6	Q9TU20
2	51	87.9	181	6	Q97911
3	51	87.9	195	6	Q97903
4	51	87.9	195	6	Q97693
5	51	87.9	200	6	Q97912
6	51	87.9	202	6	Q97908
7	51	87.9	209	6	Q97696
8	51	87.9	209	6	Q97902
9	51	87.9	211	6	Q97787
10	51	87.9	213	6	Q97904
11	51	87.9	214	6	Q97903
12	51	87.9	215	6	Q97904
13	51	87.9	216	6	Q97900
14	51	87.9	223	6	Q97910
15	51	87.9	226	6	Q97907
16	51	87.9	227	6	Q97909

17	51	87.9	233	4	P78446	P78446 homo sapien
18	51	87.9	235	6	Q97695	Q97695 giraffa cam
19	51	87.9	245	4	Q15216	Q15216 homo sapien
20	51	87.9	253	4	Q9UP19	Q9UP19 homo sapien
21	51	87.9	253	4	Q96E70	Q96E70 homo sapien
22	51	87.9	253	4	Q9BRC0	Q9BRC0 homo sapien
23	51	87.9	253	11	Q9Z0T5	Q9Z0T5 meriones un
24	51	87.9	254	6	Q9TSF8	Q9TSF8 oryctolagus
25	51	87.9	254	11	Q9QX79	Q9QX79 mus musculu
26	51	87.9	254	11	Q8VHV6	Q8VHV6 apodemus sy
27	51	87.9	256	6	Q9TV01	Q9TV01 capra hircu
28	51	87.9	256	6	Q9TV07	Q9TV07 capra hircu
29	51	87.9	256	6	Q9TTU5	Q9TTU5 ovis aries
30	51	87.9	256	6	Q9SN12	Q9SN12 ovis aries
31	51	87.9	256	6	Q9SM08	Q9SM08 budorcas ta
32	51	87.9	256	6	Q46648	Q46648 capra hircu
33	51	87.9	256	6	Q8SPV7	Q8SPV7 capra hircu
34	51	87.9	256	6	Q8SPV6	Q8SPV6 capra hircu
35	51	87.9	256	6	Q8SPV5	Q8SPV5 capra hircu
36	51	87.9	256	6	Q8SPV4	Q8SPV4 capra hircu
37	51	87.9	257	6	Q9WZU6	Q9WZU6 capra hircu
38	51	87.9	264	6	Q46593	Q46593 canis fami
39	51	87.9	285	4	Q75942	Q75942 homo sapien
40	50	86.2	141	6	Q97905	Q97905 tursiops tr
41	50	86.2	185	6	Q97694	Q97694 cervus nipp
42	50	86.2	204	6	Q97629	Q97629 odocoileus
43	50	86.2	204	6	Q9TSI8	Q9TSI8 odocoileus
44	50	86.2	204	6	Q9TSI7	Q9TSI7 odocoileus
45	50	86.2	212	6	Q97698	Q97698 cervus elap

ALIGNMENTS

RESULT 1

Q9TU20 ID Q9TU20 PRELIMINARY: PRT: 124 AA.
AC Q9TU20;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-MAY-2000 (TREMBLrel. 13, Last sequence update)
DT 01-DEC-2001 (TREMBLrel. 19, Last annotation update)
DE Prion protein (Fragment).
CN PRP.
OS Varecia variegata variegata.
OC Eukaryota; Metazoa; Chordata; Cranialata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Strepsirrhini; Lemnidae; Varecia.
OX NCBI_TaxID=87289;
[1]
RN
RP SEQUENCE FROM N.A.
RA Gilch S., Schatzl H.M.;
RT "Unusual prion protein octapeptide structure of the highly BSE-susceptible lemur monkey."
RL Submitted (AUG-1999) to the EMBL/Genbank/DDBB databases.
DR EMBL; AF177293; AAD54335.1;
DR HSSP; P04925; IAG2.
DR InterPro; IPR000817; Prion.
DR Pfam; PF00377; Prion.1.
DR PRINTS; PR00341; PRION.
DR SMART; SM00157; PRP.1.
DR PROSITE; PS00291; PRION_1; 1.
FT NON_TER
FT NON_TER
SQ SEQUENCE 124 AA; 13436 MW; CC2C8A5A855A7C94 CRC64;

Query Match 87.9%; Score 51; DB 6; Length 124;
Best Local Similarity 69.2%; Pred. No. 0.006;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 QVYKPPDXNNQ 13
||| | | | | |
Db 93 QVYKPPDXNNQ 105

```

RESULT 2
097911 PRELIMINARY; PRT; 181 AA.
AC 097911;
DT 01-MAY-1999 (TREMBLrel. 10, Created)
DT 01-MAY-1999 (TREMBLrel. 10, Last sequence update)
DT 01-JUN-2002 (TREMBLrel. 21, Last annotation update)
DE P10n protein (Fragment).
GN PRP.
OS Budorcas taxicolor (taklin).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovidae; Caprinae; Budorcas.
OX NCBI_TaxID=37181;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=PBL;
RX MEDLINE=99303687; PubMed=10373359;
RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Glich S.,
RA Schwarz T.F., Werner T., Schatzl H.M.;
RT "Analysis of 27 mammalian and 9 avian PRPs reveals high conservation
RT of flexible regions of the prion protein.";
RL J. Mol. Biol. 289:1163-1176(1999).
DR EMBL: AF117326; AAD19997.1; -.
DR HSSP: P10279; IDWY.
DR InterPro: IPR002395; KINNOGEN.
DR Pfam: PF00377; prion.1.
DR PRINTS: PRO0334; KINNOGEN.
DR PROSITE: PS00341; PRION.
DR SMART: SM00157; PRP.1.
DR PROSITE: PS00291; PRION_1; 1.
FT NON_TER 1
FT NON_TER 181
SQ SEQUENCE 181 AA; 19253 MW; A9001D086442E92A CRC64;

Query Match 87.9%; Score 51; DB 6; Length 181;
Best Local Similarity 69.2%; Pred. No. 0.0089;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 QVYXPDXDXNQ 13
| | | | | | | |
Db 136 QVYRPVQYXNQ 148

RESULT 3
097903 PRELIMINARY; PRT; 195 AA.
AC 097903;
DT 01-MAY-1999 (TREMBLrel. 10, Created)
DT 01-MAY-1999 (TREMBLrel. 10, Last sequence update)
DT 01-JUN-2002 (TREMBLrel. 21, Last annotation update)
DE P10n protein (Fragment).
GN PRP.
OS Addax nasomaculatus.
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovidae; Hippotrigonae; Addax.
OX NCBI_TaxID=59515;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=PBL;
RX MEDLINE=99303687; PubMed=10373359;
RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Glich S.,
RA Schwarz T.F., Werner T., Schatzl H.M.;
RT "Analysis of 27 mammalian and 9 avian PRPs reveals high conservation
RT of flexible regions of the prion protein.";
RL J. Mol. Biol. 289:1163-1176(1999).
DR EMBL: AF117309; AAD19980.1; -.
DR HSSP: P10279; IDWY.
DR InterPro: IPR002395; KINNOGEN.
DR PRINTS: PRO0334; KINNOGEN.
DR SMART: SM00157; PRP.1.
DR PROSITE: PS00291; PRION.
DR PROSITE: PS00706; PRION_2; 1.
FT NON_TER 1
FT NON_TER 195
SQ SEQUENCE 195 AA; 21097 MW; 9D1BE4E99AA5D031 CRC64;

Query Match 87.9%; Score 51; DB 6; Length 195;
Best Local Similarity 69.2%; Pred. No. 0.0096;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 QVYXPDXDXNQ 13
| | | | | | | |
Db 123 QVYRPVQYXNQ 135

RESULT 4
097693 PRELIMINARY; PRT; 195 AA.
AC 097693;
DT 01-MAY-1999 (TREMBLrel. 10, Created)
DT 01-MAY-1999 (TREMBLrel. 10, Last sequence update)
DT 01-DEC-2001 (TREMBLrel. 19, Last annotation update)
DE P10n protein (Fragment).
GN PRP.
OS Canis lupus (Gray wolf).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.
OX NCBI_TaxID=9612;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=PBL;
RX MEDLINE=99303687; PubMed=10373359;
RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Glich S.,
RA Schwarz T.F., Werner T., Schatzl H.M.;
RT "Analysis of 27 mammalian and 9 avian PRPs reveals high conservation
RT of flexible regions of the prion protein.";
RL J. Mol. Biol. 289:1163-1176(1999).
DR EMBL: AF113939; AAD12063.1; -.
DR HSSP: P04925; IAG2.
DR InterPro: IPR000817; PRION.
DR Pfam: PF00377; prion.1.
DR PRINTS: PRO0341; PRION.
DR SMART: SM00157; PRP.1.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
FT NON_TER 1
FT NON_TER 195
SQ SEQUENCE 195 AA; 21097 MW; 9D1BE4E99AA5D031 CRC64;

Query Match 87.9%; Score 51; DB 6; Length 195;
Best Local Similarity 69.2%; Pred. No. 0.0096;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 QVYXPDXDXNQ 13
| | | | | | | |
Db 123 QVYRPVQYXNQ 135

RESULT 5
097912 PRELIMINARY; PRT; 200 AA.
AC 097912;
DT 01-MAY-1999 (TREMBLrel. 10, Created)
DT 01-MAY-1999 (TREMBLrel. 10, Last sequence update)
DT 01-JUN-2002 (TREMBLrel. 21, Last annotation update)
DE P10n protein (Fragment).
GN PRP.
OS Bison bonasus (European bison).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovidae; Bovinae; Bison.

```

```

DR PRINTS: PRO0334; KINNOGEN.
DR PRINTS: PRO0341; PRION.
DR SMART: SM00157; PRP.1.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
FT NON_TER 1
FT NON_TER 195
SQ SEQUENCE 195 AA; 21321 MW; 6A9BA6A7E1AFC9A9 CRC64;

Query Match 87.9%; Score 51; DB 6; Length 195;
Best Local Similarity 69.2%; Pred. No. 0.0096;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 QVYXPDXDXNQ 13
| | | | | | | |
Db 127 QVYRPVQYXNQ 139

RESULT 4
097693 PRELIMINARY; PRT; 195 AA.
AC 097693;
DT 01-MAY-1999 (TREMBLrel. 10, Created)
DT 01-MAY-1999 (TREMBLrel. 10, Last sequence update)
DT 01-DEC-2001 (TREMBLrel. 19, Last annotation update)
DE P10n protein (Fragment).
GN PRP.
OS Canis lupus (Gray wolf).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.
OX NCBI_TaxID=9612;
RN [1]
RP SEQUENCE FROM N.A.
RC TISSUE=PBL;
RX MEDLINE=99303687; PubMed=10373359;
RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Glich S.,
RA Schwarz T.F., Werner T., Schatzl H.M.;
RT "Analysis of 27 mammalian and 9 avian PRPs reveals high conservation
RT of flexible regions of the prion protein.";
RL J. Mol. Biol. 289:1163-1176(1999).
DR EMBL: AF113939; AAD12063.1; -.
DR HSSP: P04925; IAG2.
DR InterPro: IPR000817; PRION.
DR Pfam: PF00377; prion.1.
DR PRINTS: PRO0341; PRION.
DR SMART: SM00157; PRP.1.
DR PROSITE: PS00291; PRION_1; 1.
DR PROSITE: PS00706; PRION_2; 1.
FT NON_TER 1
FT NON_TER 195
SQ SEQUENCE 195 AA; 21097 MW; 9D1BE4E99AA5D031 CRC64;

Query Match 87.9%; Score 51; DB 6; Length 195;
Best Local Similarity 69.2%; Pred. No. 0.0096;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 QVYXPDXDXNQ 13
| | | | | | | |
Db 123 QVYRPVQYXNQ 135

RESULT 5
097912 PRELIMINARY; PRT; 200 AA.
AC 097912;
DT 01-MAY-1999 (TREMBLrel. 10, Created)
DT 01-MAY-1999 (TREMBLrel. 10, Last sequence update)
DT 01-JUN-2002 (TREMBLrel. 21, Last annotation update)
DE P10n protein (Fragment).
GN PRP.
OS Bison bonasus (European bison).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
OC Bovidae; Bovinae; Bison.

```

OX NCBI_Taxid=9902;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC TISSUE=PBL
 RX MEDLINE=99303687; PubMed=10373359;
 RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
 RA Schwarz T.F., Werner T., Schatzl H.M.;
 RT *Analysis of 27 mammalian and 9 avian PRPs reveals high conservation
 RT of flexible regions of the prion protein.*;
 RL J. Mol. Biol. 289:1163-1178(1999).
 DR EMBL: AF113940; AAD19990.1; -
 DR HSP: P10279; IDWY.
 DR InterPro: IPR002395; Kininogen.
 DR InterPro: IPR001610; PAC.
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; Prion.1.
 DR PRINTS: PR00334; KININOGEN.
 DR PRINTS: PR00341; PRION.
 DR SMART: SM00086; PAC; 1.
 DR SMART: SM00157; PRP; 1.
 DR PROSITE: PS00291; PRION_1; 1.
 DR PROSITE: PS00706; PRION_2; 1.
 FT NON_TER 1 1
 FT NON_TER 200 200
 SQ SEQUENCE 200 AA; 21674 MW; 1F70CDF4BE5271B CRC64;
 SO
 Query Match 87.9%; Score 51; DB 6; Length 200;
 Best Local Similarity 69.2%; Pred. No. 0.0098;
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 OY 1 QVYXXPYDXYXNQ 13
 DB 128 QVYXXPYDXYXNQ 140
 |||||
 RESULT 6
 O97908 PRELIMINARY; PRT; 202 AA.
 ID O97908;
 AC O97908;
 DT 01-MAY-1999 (TREMBLrel. 10, Created)
 DT 01-MAY-1999 (TREMBLrel. 10, Last sequence update)
 DT 01-JUN-2002 (TREMBLrel. 21, Last annotation update)
 DE Prion protein (Fragment).
 GN PRP.
 OS Capra nubiana (Nubian ibex).
 OS Eukaryota; Metazoa; Chordata; Craniala; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
 OC Bovidae; Caprinae; Capra.
 NC NCBL_Taxid=72343;
 OX NCBL_Taxid=72343;
 RP SEQUENCE FROM N.A.
 RC TISSUE=PBL
 RX MEDLINE=99303687; PubMed=10373359;
 RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
 RA Schwarz T.F., Werner T., Schatzl H.M.;
 RT *Analysis of 27 mammalian and 9 avian PRPs reveals high conservation
 RT of flexible regions of the prion protein.*;
 RL J. Mol. Biol. 289:1163-1178(1999).
 DR EMBL: AF117319; AAD19990.1; -
 DR HSP: P10279; IDWY.
 DR InterPro: IPR002395; Kininogen.
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; Prion.1.
 DR PRINTS: PR00334; KININOGEN.
 DR PRINTS: PR00341; PRION.
 DR SMART: SM00157; PRP; 1.
 DR PROSITE: PS00291; PRION_1; 1.
 DR PROSITE: PS00706; PRION_2; 1.
 FT NON_TER 1 1
 FT NON_TER 202 202
 SQ SEQUENCE 202 AA; 21949 MW; DB0634A43B4DB77F CRC64;
 SO
 Query Match 87.9%; Score 51; DB 6; Length 202;

Best Local Similarity 69.2%; Pred. No. 0.0099;
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 OY 1 QVYXXPYDXYXNQ 13
 DB 135 QVYXXPYDXYXNQ 147
 |||||
 RESULT 7
 O97696 PRELIMINARY; PRT; 202 AA.
 ID O97696;
 AC O97696;
 DT 01-MAY-1999 (TREMBLrel. 10, Created)
 DT 01-MAY-1999 (TREMBLrel. 10, Last sequence update)
 DT 01-JUN-2002 (TREMBLrel. 21, Last annotation update)
 DE Prion protein (Fragment).
 GN PRP.
 OS Lama glama (Llama).
 OS Eukaryota; Metazoa; Chordata; Craniala; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Cetartiodactyla; Tylopoda; Camelidae; Lama.
 NC NCBL_Taxid=9844;
 OX NCBL_Taxid=9844;
 RP SEQUENCE FROM N.A.
 RX MEDLINE=99303687; PubMed=10373359;
 RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
 RA Schwarz T.F., Werner T., Schatzl H.M.;
 RT *Analysis of 27 mammalian and 9 avian PRPs reveals high conservation
 RT of flexible regions of the prion protein.*;
 RL J. Mol. Biol. 289:1163-1178(1999).
 DR EMBL: AF113943; AAD13291.1; -
 DR HSP: P10279; IDWY.
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; Prion.1.
 DR PRINTS: PR00341; PRION.
 DR SMART: SM00157; PRP; 1.
 DR PROSITE: PS00291; PRION_1; 1.
 DR PROSITE: PS00706; PRION_2; 1.
 FT NON_TER 1 1
 FT NON_TER 202 202
 SQ SEQUENCE 202 AA; 21860 MW; FC45332DB73F354 CRC64;
 SO
 Query Match 87.9%; Score 51; DB 6; Length 202;
 Best Local Similarity 69.2%; Pred. No. 0.0099;
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 OY 1 QVYXXPYDXYXNQ 13
 DB 123 QVYXXPYDXYXNQ 135
 |||||
 RESULT 8
 O97V02 PRELIMINARY; PRT; 209 AA.
 ID O97V02;
 AC O97V02;
 DT 01-MAY-2000 (TREMBLrel. 13, Created)
 DT 01-MAY-2000 (TREMBLrel. 13, Last sequence update)
 DT 01-JUN-2002 (TREMBLrel. 21, Last annotation update)
 DE Prion protein (Fragment).
 GN PRP.
 OS Camelus dromedarius (Dromedary) (Arabian camel).
 OS Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Cetartiodactyla; Tylopoda; Camelidae; Camelus.
 NC NCBL_Taxid=9838;
 OX NCBL_Taxid=9838;
 RP SEQUENCE FROM N.A.
 RX MEDLINE=99303687; PubMed=10373359;
 RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
 RA Schwarz T.F., Werner T., Schatzl H.M.;
 RT *Analysis of 27 mammalian and 9 avian PRPs reveals high conservation
 RT of flexible regions of the prion protein.*;
 RL J. Mol. Biol. 289:1163-1178(1999).
 DR EMBL: AF113940; AAD13288.1; -
 DR HSP: P10279; IDWY.

DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; Prion; 1.
 DR PRINTS: PR00341; PRION.
 DR SMART: SM00157; PRP; 1.
 DR PROSITE: PS00291; PRION_1; 1.
 FT NON_TER 1
 FT NON_TER 1
 SO SEQUENCE 209 AA; 22506 MW; 201E1AA9B38458EA CRC64;

Query Match
 Best Local Similarity 87.9%; Score 51; DB 6; Length 209;
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXPDXXYXNQ 13
 |||||
 DB 126 QVYRPVDQYSNQ 138

RESULT 9
 077787 PRELIMINARY; PRT; 211 AA.
 AC 077787;
 DT 01-NOV-1998 (TREMBLrel. 08, Created)
 DT 01-NOV-1998 (TREMBLrel. 08, Last sequence update)
 DT 01-JUN-2002 (TREMBLrel. 21, Last annotation update)
 DE Prion protein (Fragment).
 GN PRP
 OS Antilocapra americana (Pronghorn).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
 OC Antilocapridae; Antilocapra.
 OX NCBI_TaxID=9891;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC TISSUE=BRAIN;
 RA O'Rourke K.I., Miller M.W., Wild M.A., Williams E.S.;
 RT "Prp gene of pronghorn antelope (Antilocapra americana) contains 6
 octapeptide repeats.";
 RL Submitted (SEP-1998) to the EMBL/GenBank/DBJ databases.
 EM EMBL: AF090852; AAC43030.1; -.
 GN HSP; P10279; IDWY.
 DR InterPro: IPR002395; Kinlogen.
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; prion; 1.
 DR PRINTS: PR00341; PRIONGEN.
 DR PRINTS: PR00341; PRION.
 DR SMART: SM00157; PRP; 1.
 DR PROSITE: PS00291; PRION_1; 1.
 DR PROSITE: PS00706; PRION_2; 1.
 FT NON_TER 1
 FT NON_TER 1
 SO SEQUENCE 211 AA; 22832 MW; BBE147AADP9A6752 CRC64;

Query Match
 Best Local Similarity 87.9%; Score 51; DB 6; Length 211;
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXPDXXYXNQ 13
 |||||
 DB 148 QVYRPVDQYSNQ 160

RESULT 10
 09TV04 PRELIMINARY; PRT; 213 AA.
 AC 09TV04;
 DT 01-MAY-2000 (TREMBLrel. 13, Created)
 DT 01-MAY-2000 (TREMBLrel. 13, Last sequence update)
 DT 01-DEC-2001 (TREMBLrel. 19, Last annotation update)
 DE Prion protein (Fragment).
 GN PRP.
 OS Canis familiaris (Dog).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

OC Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.
 OX NCBI_TaxID=9615;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=9303687; Pubmed-10373359;
 RA Wopliner F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
 RA Schwarz T.F., Werner T., Schatzl H.M.;
 RT "Analysis of 27 mammalian and 9 avian PrPs reveals high conservation
 of flexible regions of the prion protein.";
 RT J. Mol. Biol. 289:1163-1178(1999).
 DR EMBL: AF113937; AAD12061.1; -.
 DR HSP; P04925; IAG2.
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; prion; 1.
 DR PRINTS: PR00341; PRION.
 DR SMART: SM00157; PRP; 1.
 DR PROSITE: PS00291; PRION_1; 1.
 DR PROSITE: PS00706; PRION_2; 1.
 FT NON_TER 1
 FT NON_TER 1
 SO SEQUENCE 213 AA; 22997 MW; 26A224EF5E7A0507 CRC64;

Query Match
 Best Local Similarity 87.9%; Score 51; DB 6; Length 213;
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXPDXXYXNQ 13
 |||||
 DB 123 QVYRPVDQYSNQ 135

RESULT 11
 09TV03 PRELIMINARY; PRT; 214 AA.
 AC 09TV03;
 DT 01-MAY-2000 (TREMBLrel. 13, Created)
 DT 01-MAY-2000 (TREMBLrel. 13, Last sequence update)
 DT 01-DEC-2001 (TREMBLrel. 19, Last annotation update)
 DE Prion protein (Fragment).
 GN PRP.
 OS Canis familiaris (Dog).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.
 OX NCBI_TaxID=9615;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC STRAIN-BRED DACHSHUND;
 RX MEDLINE=9303687; Pubmed-10373359;
 RA Wopliner F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
 RA Schwarz T.F., Werner T., Schatzl H.M.;
 RT "Analysis of 27 mammalian and 9 avian PrPs reveals high conservation
 of flexible regions of the prion protein.";
 RT J. Mol. Biol. 289:1163-1178(1999).
 DR EMBL: AF113938; AAD12062.1; -.
 DR HSP; P04925; IAG2.
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; prion; 1.
 DR PRINTS: PR00341; PRION.
 DR SMART: SM00157; PRP; 1.
 DR PROSITE: PS00291; PRION_1; 1.
 DR PROSITE: PS00706; PRION_2; 1.
 FT NON_TER 1
 FT NON_TER 1
 SO SEQUENCE 214 AA; 23167 MW; 551B7669ABD4C6DF CRC64;

Query Match
 Best Local Similarity 87.9%; Score 51; DB 6; Length 214;
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXPDXXYXNQ 13
 |||||
 DB 123 QVYRPVDQYSNQ 135

RESULT 12

ID 097904 PRELIMINARY: PRT: 215 AA.

AC 097904; 01-MAY-1999 (TREMBlrel. 10, Created)
 DT 01-MAY-1999 (TREMBlrel. 10, Last sequence update)
 DT 01-JUN-2002 (TREMBlrel. 21, Last annotation update)
 DE Prion protein (Fragment).

OS Bos javanicus (Wild banteng).
 OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
 CC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
 CC Bovidae; Bovinae; Bos.
 CC NCBI_TaxID=9906;
 OX [1]
 RN SEQUENCE FROM N.A.

RP TISSUE=PBL;
 RC MEDLINE=99303687; PubMed=10373359;
 RA Wopner F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
 RA Schwarz T.F., Werner T., Schatzl H.M.;
 RT *Analysis of 27 mammalian and 9 avian PRPs reveals high conservation
 of flexible regions of the prion protein.*;
 RL J. Mol. Biol. 289:1163-1178(1999).

DR HSSP: P10279; IDWY.
 DR InterPro: IPR001610; PAC.
 DR InterPro: IPR002395; Kininogen.
 DR InterPro: IPR001610; PAC.
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; Prion. 1.
 DR PRINTS: PR00334; KININOGEN.
 DR PRINTS: PR00341; PRION.
 DR SMART: SM00086; PAC. 1.
 DR SMART: SM00157; PRP. 1.
 DR PROSITE: PS00291; PRION_1; 1.
 DR PROSITE: PS00706; PRION_2; 1.
 FT NON_TER 1
 FT SEQUENCE 215 AA; 23182 MW; 97A36721B1E73AE6 CRC64;

Query Match 87.9%; Score 51; DB 6; Length 215;
 Best Local Similarity 69.2%; Pred. No. 0.011;
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXPXDXYNQ 13
 |||||

DB 136 QVYRPVQYSNQ 148

RESULT 13

ID 097900 PRELIMINARY: PRT: 216 AA.

AC 097900; 01-MAY-2000 (TREMBlrel. 13, Created)
 DT 01-MAY-2000 (TREMBlrel. 13, Last sequence update)
 DT 01-JUN-2002 (TREMBlrel. 21, Last annotation update)
 DE Prion protein (Fragment).

OS Bos taurus (Bovine).
 OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
 CC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
 CC Bovidae; Bovinae; Bos.
 CC NCBI_TaxID=9913;
 OX [1]
 RN SEQUENCE FROM N.A.

RP TISSUE=PBL;
 RC MEDLINE=99303687; PubMed=10373359;
 RA Wopner F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
 RA Schwarz T.F., Werner T., Schatzl H.M.;
 RT *Analysis of 27 mammalian and 9 avian PRPs reveals high conservation
 of flexible regions of the prion protein.*;
 RL J. Mol. Biol. 289:1163-1178(1999).

DR EMBL: AF117327; AADI9998.1; -

DR HSSP: P10279; IDWY.

DR InterPro: IPR001610; PAC.

DR InterPro: IPR000817; Prion.

DR Pfam: PF00377; Prion. 1.

DR PRINTS: PR00341; PRION.

DR SMART: SM00086; PAC. 1.

DR SMART: SM00157; PRP. 1.

DR PROSITE: PS00291; PRION_1; 1.

DR PROSITE: PS00706; PRION_2; 1.

FT NON_TER 1

FT SEQUENCE 216 AA; 23425 MW; BE6BECE479966730 CRC64;

Query Match 87.9%; Score 51; DB 6; Length 216;
 Best Local Similarity 69.2%; Pred. No. 0.011;
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXPXDXYNQ 13
 |||||

DB 131 QVYRPVQYSNQ 143

RESULT 14

ID 097910 PRELIMINARY: PRT: 223 AA.

AC 097910; 01-MAY-1999 (TREMBlrel. 10, Created)
 DT 01-MAY-1999 (TREMBlrel. 10, Last sequence update)
 DT 01-JUN-2002 (TREMBlrel. 21, Last annotation update)
 DE Prion protein (Fragment).

OS Hippotragus niger (Sable antelope).
 OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
 CC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
 CC Bovidae; Hippotraginae; Hippotragus.
 CC NCBI_TaxID=37189;
 OX [1]
 RN SEQUENCE FROM N.A.

RP TISSUE=PBL;
 RC MEDLINE=99303687; PubMed=10373359;
 RA Wopner F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
 RA Schwarz T.F., Werner T., Schatzl H.M.;
 RT *Analysis of 27 mammalian and 9 avian PRPs reveals high conservation
 of flexible regions of the prion protein.*;
 RL J. Mol. Biol. 289:1163-1178(1999).

DR EMBL: AF117323; AADI9994.1; -

DR HSSP: P10279; IDWY.

DR InterPro: IPR002395; Kininogen.

DR InterPro: IPR000817; Prion.

DR Pfam: PF00377; Prion. 1.

DR PRINTS: PR00334; KININOGEN.

DR PRINTS: PR00341; PRION.

DR SMART: SM00157; PRP. 1.

DR PROSITE: PS00291; PRION_1; 1.

DR PROSITE: PS00706; PRION_2; 1.

FT NON_TER 1

FT SEQUENCE 223 AA; 24172 MW; 77A95AC13080F416 CRC64;

Query Match 87.9%; Score 51; DB 6; Length 223;
 Best Local Similarity 69.2%; Pred. No. 0.011;
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXPXDXYNQ 13
 |||||

DB 136 QVYRPVQYSNQ 148

RESULT 15

ID 097907 PRELIMINARY: PRT: 226 AA.

AC 097907;

DT 01-MAY-1999 (TREMBLrel. 10, Created)
 DT 01-MAY-1999 (TREMBLrel. 10, Last sequence update)
 DT 01-JUN-2002 (TREMBLrel. 21, Last annotation update)
 DE Prion protein (Fragment).
 GN PRP.
 OS Gazella subgutturosa (Giltred gazelle).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
 OC Bovidae; Antilopinae; Gazella.
 CX NCBI_TaxID:59529;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC TISSUE=PBL;
 RX MEDLINE:99303687; PubMed:10373359;
 RA Mofner F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
 RT Schwarz T.F., Werner T., Schatzl H.M.;
 RT "Analysis of 27 mammalian and 9 avian PRPs reveals high conservation
 of flexible regions of the prion protein.";
 RL J. Mol. Biol. 289:1163-1178(1999).
 DR EMBL: AF117313; AAD19984.1; ..
 DR HSSP: P10279; 10MY.
 DR InterPro: IPR002395; Kinllogen.
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; Prion; 1.
 DR PRINTS; PR00341; KININGEN.
 DR PRINTS; PR00341; PRION.
 DR SMART; SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 FT NON_TER 1 1
 FT VARIANT 209 209 R -> K.
 FT NON_TER 226 226
 SQ SEQUENCE 226 AA; 24384 MW; D845E27B219ABD2F CRC64;
 Query Match 87.9%; Score 51; DB 6; Length 226;
 Best Local Similarity 69.2%; Pred. No. 0.011;
 Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
 QY 1 QVYYPXDXYNQ 13
 DB 141 QVYYPVDDYSNQ 153

Search completed: March 24, 2003, 17:22:11
 Job time : 26.4375 secs

RESULT 2

US-08-244-701B-45

Sequence 45, Application US/08244701B

Patent No. 5773572

GENERAL INFORMATION:

APPLICANT: Fishleigh, Robert V.

APPLICANT: Robson, Barry

APPLICANT: Mee, Roger P.

TITLE OF INVENTION: Fragments of Prion Proteins

NUMBER OF SEQUENCES: 67

CORRESPONDENCE ADDRESS:

ADDRESSEE: Pennie & Edmonds

STREET: 1155 Avenue of the Americas

CITY: New York

STATE: New York

COUNTRY: U.S.A.

ZIP: 10036

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/244,701B

FILING DATE: 02-JUN-1994

CLASSIFICATION: 436

ATTORNEY/AGENT INFORMATION:

NAME: Fanucci, Allan A.

REGISTRATION NUMBER: 30,256

REFERENCE/DOCKET NUMBER: 8080-007

TELEPHONE: (212) 790-9090

TELEFAX: (212) 869-8864/9741

TELEX: 66141 PENNIE

INFORMATION FOR SEQ ID NO: 45:

SEQUENCE CHARACTERISTICS:

LENGTH: 27 amino acids

TYPE: amino acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: peptide

US-08-244-701B-45

Query Match 87.9%; Score 51; DB 1; Length 27;

Best Local Similarity 69.2%; Pred. No. 0.0016;

Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY

1 QVYXPVDRYSNQ 13

Db

8 QVYXPVDRYSNQ 20

RESULT 3

US-09-076-721-44

Sequence 44, Application US/09076721

Patent No. 6379905

GENERAL INFORMATION:

APPLICANT: Fishleigh, Robert V.

APPLICANT: Robson, Barry

APPLICANT: Mee, Roger P.

TITLE OF INVENTION: Fragments of Prion Proteins

NUMBER OF SEQUENCES: 67

CORRESPONDENCE ADDRESS:

ADDRESSEE: Pennie & Edmonds

STREET: 1155 Avenue of the Americas

CITY: New York

STATE: New York

COUNTRY: U.S.A.

ZIP: 10036

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/076,721

FILING DATE:

CLASSIFICATION:

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/244,701

FILING DATE:

ATTORNEY/AGENT INFORMATION:

NAME: Fanucci, Allan A.

REGISTRATION NUMBER: 30,256

REFERENCE/DOCKET NUMBER: 8080-007

TELEPHONE: (212) 790-9090

TELEFAX: (212) 869-8864/9741

TELEX: 66141 PENNIE

INFORMATION FOR SEQ ID NO: 44:

SEQUENCE CHARACTERISTICS:

LENGTH: 27 amino acids

TYPE: amino acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: peptide

US-09-076-721-44

Query Match 87.9%; Score 51; DB 4; Length 27;

Best Local Similarity 69.2%; Pred. No. 0.0016;

Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY

1 QVYXPVDRYSNQ 13

Db

8 QVYXPVDRYSNQ 20

RESULT 4

US-09-076-721-45

Sequence 45, Application US/09076721

Patent No. 6379905

GENERAL INFORMATION:

APPLICANT: Fishleigh, Robert V.

APPLICANT: Robson, Barry

APPLICANT: Mee, Roger P.

TITLE OF INVENTION: Fragments of Prion Proteins

NUMBER OF SEQUENCES: 67

CORRESPONDENCE ADDRESS:

ADDRESSEE: Pennie & Edmonds

STREET: 1155 Avenue of the Americas

CITY: New York

STATE: New York

COUNTRY: U.S.A.

ZIP: 10036

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk

COMPUTER: IBM PC compatible

OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/076,721

FILING DATE:

CLASSIFICATION:

PRIOR APPLICATION DATA:

APPLICATION NUMBER: US 08/244,701

FILING DATE:

ATTORNEY/AGENT INFORMATION:

NAME: Fanucci, Allan A.

REGISTRATION NUMBER: 30,256

REFERENCE/DOCKET NUMBER: 8080-007

TELEPHONE: (212) 790-9090

TELEFAX: (212) 869-8864/9741

TELEX: 66141 PENNIE

INFORMATION FOR SEQ ID NO: 45:

SEQUENCE CHARACTERISTICS:
LENGTH: 27 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-09-076-721-45

Query Match 87.9%; Score 51; DB 4; Length 27;
Best Local Similarity 69.2%; Pred. No. 0.0016;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 QVYXPXDXNYNQ 13
DB 8 QVYRPVDRYSNQ 20

RESULT 5

US-08-244-701B-16
Sequence 16, Application US/08244701B
Patent No. 5773572

GENERAL INFORMATION:
APPLICANT: Fishleigh, Robert V.
APPLICANT: Robson, Barry
TITLE OF INVENTION: Fragments of Prion Proteins
NUMBER OF SEQUENCES: 67
CORRESPONDENCE ADDRESS:
ADDRESSEE: Pennle & Edmonds
STREET: 1155 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: U.S.A.
ZIP: 10036

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentln Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/244,701B
FILING DATE: 02-JUN-1994
CLASSIFICATION: 436

ATTORNEY/AGENT INFORMATION:

NAME: Faunccl, Allan A.
REGISTRATION NUMBER: 30,256
REFERENCE/DOCKET NUMBER: 8080-007
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
TELEFAX: (212) 869-8864/9741
TELEX: 66141 PENNIE

INFORMATION FOR SEQ ID NO: 16:

SEQUENCE CHARACTERISTICS:
LENGTH: 28 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
FEATURE:

NAME/KEY: Modified-site

LOCATION: 1
OTHER INFORMATION: /label-X
OTHER INFORMATION: /note-X may be absent or present independently
OTHER INFORMATION: of Y and denotes one or more amino acid(s)"

FEATURE:

NAME/KEY: Modified-site

LOCATION: 28

OTHER INFORMATION: /label-Y
OTHER INFORMATION: /note-Y may be absent or present independently
OTHER INFORMATION: of X and denotes one or more amino acid(s)"
US-08-244-701B-16

Query Match 87.9%; Score 51; DB 1; Length 28;
Best Local Similarity 69.2%; Pred. No. 0.0017;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 QVYXPXDXNYNQ 13
DB 6 QVYRPVDRYSNQ 18

RESULT 6

US-08-244-701B-17
Sequence 17, Application US/08244701B
Patent No. 5773572

GENERAL INFORMATION:
APPLICANT: Fishleigh, Robert V.
APPLICANT: Robson, Barry
TITLE OF INVENTION: Fragments of Prion Proteins
NUMBER OF SEQUENCES: 67
CORRESPONDENCE ADDRESS:
ADDRESSEE: Pennle & Edmonds
STREET: 1155 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: U.S.A.
ZIP: 10036

COMPUTER READABLE FORM:

MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentln Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/244,701B
FILING DATE: 02-JUN-1994
CLASSIFICATION: 436

ATTORNEY/AGENT INFORMATION:

NAME: Faunccl, Allan A.
REGISTRATION NUMBER: 30,256
REFERENCE/DOCKET NUMBER: 8080-007
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
TELEFAX: (212) 869-8864/9741
TELEX: 66141 PENNIE

INFORMATION FOR SEQ ID NO: 17:

SEQUENCE CHARACTERISTICS:
LENGTH: 28 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
FEATURE:

NAME/KEY: Modified-site

LOCATION: 1
OTHER INFORMATION: /label-X
OTHER INFORMATION: /note-X may be absent or present independently
OTHER INFORMATION: of Y and denotes one or more amino acid(s)"

FEATURE:

NAME/KEY: Modified-site

LOCATION: 28

OTHER INFORMATION: /label-Y
OTHER INFORMATION: /note-Y may be absent or present independently
OTHER INFORMATION: of X and denotes one or more amino acid(s)"
US-08-244-701B-17

Query Match 87.9%; Score 51; DB 1; Length 28;
Best Local Similarity 69.2%; Pred. No. 0.0017;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 QVYXPXDXNYNQ 13
DB 6 QVYRPVDRYSNQ 18

```

RESULT 7
US-08-244-701B-18
; Sequence 18, Application US/08244701B
; Patent No. 5773572
; GENERAL INFORMATION:
; APPLICANT: Fishleigh, Robert V.
; APPLICANT: Robson, Barry
; APPLICANT: Mee, Roger P.
; TITLE OF INVENTION: Fragments of Prion Proteins
; NUMBER OF SEQUENCES: 67
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Pennie & Edmonds
; STREET: 1155 Avenue of the Americas
; CITY: New York
; STATE: New York
; COUNTRY: U.S.A.
; ZIP: 10036
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/244,701B
; FILING DATE: 02-JUN-1994
; CLASSIFICATION: 436
; ATTORNEY/AGENT INFORMATION:
; NAME: Fanuccl, Allan A.
; REGISTRATION NUMBER: 30,256
; REFERENCE/DOCKET NUMBER: 8080-007
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 790-9090
; TELEFAX: (212) 869-8864/9741
; TELEX: 66141 PENNIE
; INFORMATION FOR SEQ ID NO: 18:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 28 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FEATURE:
; NAME/KEY: Modified-site
; LOCATION: 1
; OTHER INFORMATION: /label=X
; OTHER INFORMATION: /note="X may be absent or present independently
; OTHER INFORMATION: of Y and denotes one or more amino acid(s)"
; FEATURE:
; NAME/KEY: Modified-site
; LOCATION: 28
; OTHER INFORMATION: /label=Y
; OTHER INFORMATION: /note="Y may be absent or present independently
; OTHER INFORMATION: of X and denotes one or more amino acid(s)"
US-08-244-701B-18
Query Match 87.9%; Score 51; DB 1; Length 28;
Best Local Similarity 69.2%; Pred. No. 0.0017;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 QVYYPXDXYYNQ 13
|||||
DB 6 QVYYPMDYXNQ 18

RESULT 8
US-09-076-721-16
; Sequence 16, Application US/09076721
; Patent No. 6379905
; GENERAL INFORMATION:
; APPLICANT: Fishleigh, Robert V.
; APPLICANT: Robson, Barry
; APPLICANT: Mee, Roger P.
; TITLE OF INVENTION: Fragments of Prion Proteins
; NUMBER OF SEQUENCES: 67
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Pennie & Edmonds
; STREET: 1155 Avenue of the Americas
; CITY: New York
; STATE: New York
; COUNTRY: U.S.A.
; ZIP: 10036
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/076,721
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/244,701
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Fanuccl, Allan A.
; REGISTRATION NUMBER: 30,256
; REFERENCE/DOCKET NUMBER: 8080-007
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 790-9090
; TELEFAX: (212) 869-8864/9741
; TELEX: 66141 PENNIE
; INFORMATION FOR SEQ ID NO: 16:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 28 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FEATURE:
; NAME/KEY: Modified-site
; LOCATION: 1
; OTHER INFORMATION: /label=X
; OTHER INFORMATION: /note="X may be absent or present independently
; OTHER INFORMATION: of Y and denotes one or more amino acid(s)"
; OTHER INFORMATION: of X and denotes one or more amino acid(s)"
US-09-076-721-16
Query Match 87.9%; Score 51; DB 4; Length 28;
Best Local Similarity 69.2%; Pred. No. 0.0017;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 QVYYPXDXYYNQ 13
|||||
DB 6 QVYYPVQYXNQ 18

```

```

; NUMBER OF SEQUENCES: 67
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Pennie & Edmonds
; STREET: 1155 Avenue of the Americas
; CITY: New York
; STATE: New York
; COUNTRY: U.S.A.
; ZIP: 10036
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/09/076,721
; FILING DATE:
; CLASSIFICATION:
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 08/244,701
; FILING DATE:
; ATTORNEY/AGENT INFORMATION:
; NAME: Fanuccl, Allan A.
; REGISTRATION NUMBER: 30,256
; REFERENCE/DOCKET NUMBER: 8080-007
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (212) 790-9090
; TELEFAX: (212) 869-8864/9741
; TELEX: 66141 PENNIE
; INFORMATION FOR SEQ ID NO: 16:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 28 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; FEATURE:
; NAME/KEY: Modified-site
; LOCATION: 1
; OTHER INFORMATION: /label=X
; OTHER INFORMATION: /note="X may be absent or present independently
; OTHER INFORMATION: of Y and denotes one or more amino acid(s)"
; OTHER INFORMATION: of X and denotes one or more amino acid(s)"
US-09-076-721-16
Query Match 87.9%; Score 51; DB 4; Length 28;
Best Local Similarity 69.2%; Pred. No. 0.0017;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 QVYYPXDXYYNQ 13
|||||
DB 6 QVYYPVQYXNQ 18

RESULT 9
US-09-076-721-17
; Sequence 17, Application US/09076721
; Patent No. 6379905
; GENERAL INFORMATION:
; APPLICANT: Fishleigh, Robert V.
; APPLICANT: Robson, Barry
; APPLICANT: Mee, Roger P.
; TITLE OF INVENTION: Fragments of Prion Proteins
; NUMBER OF SEQUENCES: 67
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Pennie & Edmonds
; STREET: 1155 Avenue of the Americas
; CITY: New York
; STATE: New York

```

COUNTRY: U.S.A.
ZIP: 10036
COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/076,721
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/244,701
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Panucci, Allan A.
REGISTRATION NUMBER: 30,256
REFERENCE/DOCKET NUMBER: 8080-007
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
TELEFAX: (212) 869-8864/9741
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 17:
SEQUENCE CHARACTERISTICS:
LENGTH: 28 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
FEATURE:
NAME/KEY: Modified-site
LOCATION: 1
OTHER INFORMATION: /label=X
OTHER INFORMATION: /note="X may be absent or present independently
OTHER INFORMATION: of Y and denotes one or more amino acid(s)"
FEATURE:
NAME/KEY: Modified-site
LOCATION: 28
OTHER INFORMATION: /label=Y
OTHER INFORMATION: /note="Y may be absent or present independently
OTHER INFORMATION: of X and denotes one or more amino acid(s)"
US-09-076-721-17
Query Match 87.9%; Score 51; DB 4; Length 28;
Best Local Similarity 69.2%; Pred. No. 0.0017;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1 QVYXXPDXYXNQ 13
DB 6 QVYXXPDXYXNQ 18
RESULT 10
US-09-076-721-18
Sequence 18, Application US/09076721
Patent No. 6379905
GENERAL INFORMATION:
APPLICANT: Fishleigh, Robert V.
APPLICANT: Robson, Barry
TITLE OF INVENTION: Fragments of Pilon Proteins
NUMBER OF SEQUENCES: 67
CORRESPONDENCE ADDRESS:
ADDRESSEE: Pennie & Edmonds
STREET: 1155 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: U.S.A.
ZIP: 10036
COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS

SOFTWARE: Patent Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/076,721
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/244,701
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Panucci, Allan A.
REGISTRATION NUMBER: 30,256
REFERENCE/DOCKET NUMBER: 8080-007
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
TELEFAX: (212) 869-8864/9741
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 18:
SEQUENCE CHARACTERISTICS:
LENGTH: 28 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
FEATURE:
NAME/KEY: Modified-site
LOCATION: 1
OTHER INFORMATION: /label=X
OTHER INFORMATION: /note="X may be absent or present independently
OTHER INFORMATION: of Y and denotes one or more amino acid(s)"
FEATURE:
NAME/KEY: Modified-site
LOCATION: 28
OTHER INFORMATION: /label=Y
OTHER INFORMATION: /note="Y may be absent or present independently
OTHER INFORMATION: of X and denotes one or more amino acid(s)"
US-09-076-721-18
Query Match 87.9%; Score 51; DB 4; Length 28;
Best Local Similarity 69.2%; Pred. No. 0.0017;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
QY 1 QVYXXPDXYXNQ 13
DB 6 QVYXXPDXYXNQ 18
RESULT 11
US-08-244-701B-13
Sequence 13, Application US/08244701B
Patent No. 5773572
GENERAL INFORMATION:
APPLICANT: Fishleigh, Robert V.
APPLICANT: Robson, Barry
TITLE OF INVENTION: Fragments of Pilon Proteins
NUMBER OF SEQUENCES: 67
CORRESPONDENCE ADDRESS:
ADDRESSEE: Pennie & Edmonds
STREET: 1155 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: U.S.A.
ZIP: 10036
COMPUTER READABLE FORM:
MEDIUM TYPE: floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patent Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/244,701B
FILING DATE: 02-JUN-1994
CLASSIFICATION: 436
ATTORNEY/AGENT INFORMATION:

NAME: Panucci, Allan A.
REGISTRATION NUMBER: 30,256
REFERENCE/DOCKET NUMBER: 8080-007
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
TELEFAX: (212) 869-8864/9741
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
LENGTH: 31 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
FEATURE:
NAME/KEY: Modified-site
LOCATION: 1
OTHER INFORMATION: /label-X
OTHER INFORMATION: /note-"X may be absent or present independently
OTHER INFORMATION: of Y and denotes one or more amino acid(s)"
FEATURE:
NAME/KEY: Modified-site
LOCATION: 31
OTHER INFORMATION: /label-Y
OTHER INFORMATION: /note-"Y may be absent or present independently
OTHER INFORMATION: of X and denotes one or more amino acid(s)"
US-08-244-701B-13
Query Match
Best Local Similarity 87.9%; Score 51; DB 1; Length 31;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
DB 9 QVYXPVDOYSNQ 21
RESULT 12
US-08-244-701B-14
Sequence 14, Application US/08244701B
Patent No. 5773572
GENERAL INFORMATION:
APPLICANT: Fishleigh, Robert V.
APPLICANT: Robson, Barry
TITLE OF INVENTION: Fragments of Prion Proteins
NUMBER OF SEQUENCES: 67
CORRESPONDENCE ADDRESS:
ADDRESSEE: Pennie & Edmonds
STREET: 1155 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: U.S.A.
ZIP: 10036
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/244,701B
FILING DATE: 02-JUN-1994
CLASSIFICATION: 436
ATTORNEY/AGENT INFORMATION:
NAME: Panucci, Allan A.
REGISTRATION NUMBER: 30,256
REFERENCE/DOCKET NUMBER: 8080-007
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
TELEFAX: (212) 869-8864/9741
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 14:
SEQUENCE CHARACTERISTICS:

LENGTH: 31 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
FEATURE:
NAME/KEY: Modified-site
LOCATION: 1
OTHER INFORMATION: /label-X
OTHER INFORMATION: /note-"X may be absent or present independently
OTHER INFORMATION: of Y and denotes one or more amino acid(s)"
US-08-244-701B-14
Query Match
Best Local Similarity 87.9%; Score 51; DB 1; Length 31;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
DB 9 QVYXPVDOYSNQ 21
RESULT 13
US-08-244-701B-15
Sequence 15, Application US/08244701B
Patent No. 5773572
GENERAL INFORMATION:
APPLICANT: Fishleigh, Robert V.
APPLICANT: Robson, Barry
TITLE OF INVENTION: Fragments of Prion Proteins
NUMBER OF SEQUENCES: 67
CORRESPONDENCE ADDRESS:
ADDRESSEE: Pennie & Edmonds
STREET: 1155 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: U.S.A.
ZIP: 10036
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/244,701B
FILING DATE: 02-JUN-1994
CLASSIFICATION: 436
ATTORNEY/AGENT INFORMATION:
NAME: Panucci, Allan A.
REGISTRATION NUMBER: 30,256
REFERENCE/DOCKET NUMBER: 8080-007
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
TELEFAX: (212) 869-8864/9741
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 15:
SEQUENCE CHARACTERISTICS:
LENGTH: 31 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
FEATURE:
NAME/KEY: Modified-site
LOCATION: 1
OTHER INFORMATION: /label-X

OTHER INFORMATION: /note="X may be absent or present independently,
OTHER INFORMATION: of Y and denotes one or more amino acid(s)"
FEATURE:
NAME/KEY: Modified-site
LOCATION: 31
OTHER INFORMATION: /label-Y
OTHER INFORMATION: /note="Y may be absent or present independently
OTHER INFORMATION: of X and denotes one or more amino acid(s)"
US-08-244-701B-15

Query Match 87.9%; Score 51; DB 1; Length 31;
Best Local Similarity 69.2%; Pred. No. 0.0019;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYYPXDXYNQ 13
||| | | | | |
Db 9 QVYRPMDEYSNQ 21

RESULT 14
US-09-076-721-13
Sequence 13, Application US/09076721
Patent No. 6379905
GENERAL INFORMATION:
APPLICANT: Fishleigh, Robert V.
APPLICANT: Robson, Barry
APPLICANT: Mee, Roger P.
TITLE OF INVENTION: Fragments of Prion Proteins
NUMBER OF SEQUENCES: 67
CORRESPONDENCE ADDRESS:
ADDRESSEE: Pennie & Edmonds
STREET: 1155 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: U.S.A.
ZIP: 10036
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/076,721
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/244,701
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Fanucci, Allan A.
REGISTRATION NUMBER: 30,256
REFERENCE/DOCKET NUMBER: 8080-007
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
TELEFAX: (212) 869-8864/9741
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 13:
SEQUENCE CHARACTERISTICS:
LENGTH: 31 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
FEATURE:
NAME/KEY: Modified-site
LOCATION: 1
OTHER INFORMATION: /label-X
OTHER INFORMATION: /note="X may be absent or present independently
OTHER INFORMATION: of Y and denotes one or more amino acid(s)"
FEATURE:
NAME/KEY: Modified-site
LOCATION: 31
OTHER INFORMATION: /label-Y

OTHER INFORMATION: /note="Y may be absent or present independently
OTHER INFORMATION: of X and denotes one or more amino acid(s)"
US-09-076-721-13

Query Match 87.9%; Score 51; DB 4; Length 31;
Best Local Similarity 69.2%; Pred. No. 0.0019;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYYPXDXYNQ 13
||| | | | | |
Db 9 QVYRPMDEYSNQ 21

RESULT 15
US-09-076-721-14
Sequence 14, Application US/09076721
Patent No. 6379905
GENERAL INFORMATION:
APPLICANT: Fishleigh, Robert V.
APPLICANT: Robson, Barry
APPLICANT: Mee, Roger P.
TITLE OF INVENTION: Fragments of Prion Proteins
NUMBER OF SEQUENCES: 67
CORRESPONDENCE ADDRESS:
ADDRESSEE: Pennie & Edmonds
STREET: 1155 Avenue of the Americas
CITY: New York
STATE: New York
COUNTRY: U.S.A.
ZIP: 10036
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/076,721
FILING DATE:
CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/244,701
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Fanucci, Allan A.
REGISTRATION NUMBER: 30,256
REFERENCE/DOCKET NUMBER: 8080-007
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
TELEFAX: (212) 869-8864/9741
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 14:
SEQUENCE CHARACTERISTICS:
LENGTH: 31 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
FEATURE:
NAME/KEY: Modified-site
LOCATION: 1
OTHER INFORMATION: /label-X
OTHER INFORMATION: /note="X may be absent or present independently
OTHER INFORMATION: of Y and denotes one or more amino acid(s)"
FEATURE:
NAME/KEY: Modified-site
LOCATION: 31
OTHER INFORMATION: /label-Y
OTHER INFORMATION: /note="Y may be absent or present independently
OTHER INFORMATION: of X and denotes one or more amino acid(s)"
US-09-076-721-14

Query Match 87.9%; Score 51; DB 4; Length 31;
Best Local Similarity 69.2%; Pred. No. 0.0019;

Wed Mar 26 09:13:02 2003

us-09-508-828b-2.rai

Page 8

Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 QVYXXRXDXYNQ 13

Db 9 QVYXRVPVDRISNQ 21

Search completed: March 24, 2003, 17:23:05
Job time : 13.4583 secs

GenCore version 5.1.4_p5-4578
Copyright (c) 1993 - 2003 Compugen Ltd.

OW protein - protein search, using SW model

Run on: March 24, 2003, 17:23:11 ; Search time 11.6458 seconds
(without alignments)
59.679 Million cell updates/sec

Title: US-09-508-828B-2

Perfect score: 58

Sequence: 1 QVYXPDXKXNQ 13

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 221153 seqs, 53462247 residues

Total number of hits satisfying chosen parameters: 221153

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

Database : Published Applications AA:*

- 1: /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pep.*
- 2: /cgn2_6/ptodata/1/pubpaa/PCT_NEW_PUB.pep.*
- 3: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep.*
- 4: /cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep.*
- 5: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep.*
- 6: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep.*
- 7: /cgn2_6/ptodata/1/pubpaa/PCTUS_PUBCOMB.pep.*
- 8: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep.*
- 9: /cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep.*
- 10: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep.*
- 11: /cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep.*
- 12: /cgn2_6/ptodata/1/pubpaa/US10_PUBCOMB.pep.*
- 13: /cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB.pep.*
- 14: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	51	87.9	46	9 US-09-939-780-4	Sequence 4, Appl1
2	51	87.9	46	10 US-09-147-761-4	Sequence 4, Appl1
3	51	87.9	161	10 US-09-745-003-7	Sequence 7, Appl1
4	51	87.9	161	10 US-09-745-003-9	Sequence 9, Appl1
5	51	87.9	164	10 US-09-745-003-10	Sequence 10, Appl1
6	51	87.9	162	10 US-09-745-003-12	Sequence 12, Appl1
7	51	87.9	253	10 US-09-904-987-3	Sequence 3, Appl1
8	51	87.9	253	10 US-09-919-172-57	Sequence 57, Appl1
9	51	87.9	253	10 US-09-943-906-2	Sequence 2, Appl1
10	51	87.9	254	9 US-10-106-574-5	Sequence 5, Appl1
11	51	87.9	254	9 US-10-106-574-6	Sequence 6, Appl1
12	51	87.9	254	9 US-10-106-574-7	Sequence 7, Appl1
13	51	87.9	254	9 US-10-106-574-8	Sequence 8, Appl1
14	51	87.9	254	10 US-09-943-906-1	Sequence 1, Appl1
15	51	87.9	255	10 US-09-943-906-4	Sequence 4, Appl1
16	51	87.9	256	9 US-10-109-551-2	Sequence 2, Appl1
17	51	87.9	256	9 US-10-109-551-4	Sequence 4, Appl1
18	51	87.9	263	10 US-09-943-906-3	Sequence 3, Appl1
19	51	87.9	264	9 US-10-209-194-2	Sequence 2, Appl1

20	51	87.9	439	9 US-10-115-984-2	Sequence 2, Appl1
21	50	86.2	163	10 US-09-745-003-11	Sequence 11, Appl1
22	50	86.2	256	9 US-10-109-551-6	Sequence 6, Appl1
23	50	86.2	256	9 US-10-109-551-8	Sequence 8, Appl1
24	50	86.2	256	9 US-10-109-551-10	Sequence 10, Appl1
25	46	79.3	338	9 US-09-738-626-4405	Sequence 4405, Ap
26	34	58.6	1511	10 US-09-801-368-230	Sequence 250, App
27	33	56.9	1564	10 US-09-801-368-244	Sequence 244, App
28	32	55.2	548	9 US-09-869-877-4	Sequence 4, Appl1
29	32	55.2	548	10 US-09-732-350-4	Sequence 4, Appl1
30	32	55.2	785	10 US-09-801-368-348	Sequence 348, App
31	31	53.4	401	9 US-09-738-626-6684	Sequence 6684, Ap
32	31	53.4	518	10 US-09-815-242-12473	Sequence 12473, A
33	31	53.4	564	10 US-09-815-242-12469	Sequence 12469, A
34	31	53.4	599	9 US-09-869-877-6	Sequence 6, Appl1
35	31	53.4	599	10 US-09-732-350-6	Sequence 6, Appl1
36	30	51.7	80	10 US-09-925-297-554	Sequence 554, App
37	30	51.7	116	10 US-09-867-550-650	Sequence 650, App
38	30	51.7	415	10 US-09-925-301-1192	Sequence 1192, Ap
39	30	51.7	481	10 US-09-901-884-7	Sequence 7, Appl1
40	30	51.7	483	9 US-09-738-626-4842	Sequence 4842, Ap
41	30	51.7	822	10 US-09-981-908-9	Sequence 9, Appl1
42	30	51.7	863	10 US-09-946-239-11	Sequence 11, Appl1
43	29	50.0	66	9 US-09-984-245-267	Sequence 267, App
44	29	50.0	66	9 US-09-966-262-267	Sequence 267, App
45	29	50.0	74	10 US-09-864-761-36478	Sequence 36478, A

ALIGNMENTS

RESULT 1
US-09-939-780-4
Sequence 4, Application US/09939780
Patent No. US20020168689A1
GENERAL INFORMATION:
APPLICANT: O'Connor, Michael
TITLE OF INVENTION: Immunological Assay for Spongiform Encephalopathies
FILE REFERENCE: 5000205
CURRENT APPLICATION NUMBER: US/09/939,780
PRIOR FILING DATE: 2001-08-28
PRIOR APPLICATION NUMBER: 09/147,761
PRIOR FILING DATE: 1999-03-03
PRIOR APPLICATION NUMBER: PCT/IE98/00007
NUMBER OF SEQ ID NOS: 5
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 4
LENGTH: 46
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Description of Artificial Sequence: Prion protein
US-09-939-780-4

Query Match 87.9%; Score 51; DB 9; Length 46;
Best Local Similarity 69.2%; Pred. No. 0.0016;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 QVYXPDXKXNQ 13
DB 32 QVYRPPVDRYSNQ 44

RESULT 2
US-09-147-761-4
Sequence 4, Application US/09147761
Patent No. US20010010918A1
GENERAL INFORMATION:
APPLICANT:
TITLE OF INVENTION: IMMUNOLOGICAL ASSAY FOR SPONGIFORM
ENCEPHALOPATHIES

NUMBER OF SEQUENCES: 4
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30 (EPO)
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/147,761
FILING DATE:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: WO IE/98/00007
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: CRISTINA GATES
REFERENCE/DOCKET NUMBER: PL678pct
TELEPHONE: 353-1-6605033
TELEFAX: 353-1-6606920
INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 46
TYPE: amino acid
TOPOLOGY: unknown
MOLECULE TYPE: amino acid
HYPOTHETICAL:
ANTI-SENSE:
ORIGINAL SOURCE:
ORGANISM:
CELL TYPE:
US-09-147-761-4

Query Match
Best Local Similarity 87.9%; Score 51; DB 10; Length 46;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 QVYYPXDXYXNQ 13
DB 32 QVYRPVDRYSNQ 44

RESULT 3
US-09-745-003-7
Sequence 7, Application US/09745003
Patent No. US20020042122A1
GENERAL INFORMATION:
APPLICANT: Bazan, Fernando J
TITLE OF INVENTION: Human Proteins; Related Reagents
FILE REFERENCE: Prp2
CURRENT APPLICATION NUMBER: US/09/745,003
CURRENT FILING DATE: 2000-12-20
NUMBER OF SEQ ID NOS: 13
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 7
LENGTH: 161
TYPE: Prt
ORGANISM: sheep
US-09-745-003-7

Query Match
Best Local Similarity 87.9%; Score 51; DB 10; Length 161;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 QVYYPXDXYXNQ 13
DB 68 QVYRPVDRYSNQ 80

RESULT 4
US-09-745-003-9
Sequence 9, Application US/09745003
Patent No. US20020042122A1
GENERAL INFORMATION:
APPLICANT: Bazan, Fernando J

TITLE OF INVENTION: Human Proteins; Related Reagents
FILE REFERENCE: Prp2
CURRENT APPLICATION NUMBER: US/09/745,003
CURRENT FILING DATE: 2000-12-20
NUMBER OF SEQ ID NOS: 13
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 9
LENGTH: 161
TYPE: Prt
ORGANISM: bovine
US-09-745-003-9

Query Match
Best Local Similarity 87.9%; Score 51; DB 10; Length 161;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 QVYYPXDXYXNQ 13
DB 68 QVYRPVDRYSNQ 80

RESULT 5
US-09-745-003-10
Sequence 10, Application US/09745003
Patent No. US20020042122A1
GENERAL INFORMATION:
APPLICANT: Bazan, Fernando J
TITLE OF INVENTION: Human Proteins; Related Reagents
FILE REFERENCE: Prp2
CURRENT APPLICATION NUMBER: US/09/745,003
CURRENT FILING DATE: 2000-12-20
NUMBER OF SEQ ID NOS: 13
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 10
LENGTH: 162
TYPE: Prt
ORGANISM: primate
US-09-745-003-10

Query Match
Best Local Similarity 87.9%; Score 51; DB 10; Length 162;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 QVYYPXDXYXNQ 13
DB 69 QVYRPVDRYSNQ 81

RESULT 6
US-09-745-003-12
Sequence 12, Application US/09745003
Patent No. US20020042122A1
GENERAL INFORMATION:
APPLICANT: Bazan, Fernando J
TITLE OF INVENTION: Human Proteins; Related Reagents
FILE REFERENCE: Prp2
CURRENT APPLICATION NUMBER: US/09/745,003
CURRENT FILING DATE: 2000-12-20
NUMBER OF SEQ ID NOS: 13
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 12
LENGTH: 164
TYPE: Prt
ORGANISM: rodent
US-09-745-003-12

Query Match
Best Local Similarity 87.9%; Score 51; DB 10; Length 164;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 QVYYPXDXYXNQ 13
DB 69 QVYRPVDRYSNQ 81


```
RESULT 7
US-09-904-987-3
; Sequence 3, Application US/09904987
; Patent No. US20020037908A1
; GENERAL INFORMATION:
; APPLICANT: No. US20020037908A1actyl, Inc.
; TITLE OF INVENTION: Methods and Compositions for Controlling Pathological and Prepath
; FILE REFERENCE: 42108/26146
; CURRENT APPLICATION NUMBER: US/09/904,987
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: Patentin version 3.0
; SEQ ID NO 3
; LENGTH: 253
; TYPE: PRT
; ORGANISM: homo sapiens
; PUBLICATION INFORMATION:
; DATABASE ACCESSION NUMBER: NCBI ENTREZ / XM_009567
; DATABASE ENTRY DATE: 2001-04-17
; RELEVANT RESIDUES: (1)..(253)
US-09-904-987-3

Query Match      87.9%  Score 51; DB 10; Length 253;
Best Local Similarity 69.2%  Pred. No. 0.0088;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 QVYXXPXDXXXNQ 13
| | | | | | | |
Db 160 QVYXXPMDEYSNQ 172

RESULT 8
US-09-919-172-57
; Sequence 57, Application US/09919172
; Patent No. US20020119463A1
; GENERAL INFORMATION:
; APPLICANT: Turner, Christopher M.
; TITLE OF INVENTION: PROSTATE CANCER MARKERS
; FILE REFERENCE: PA-0036 US
; CURRENT APPLICATION NUMBER: US/09/919,172
; CURRENT FILING DATE: 2001-07-30
; PRIOR APPLICATION NUMBER: 60/222,469
; PRIOR FILING DATE: 2000-07-28
; NUMBER OF SEQ ID NOS: 102
; SOFTWARE: PERL Program
; SEQ ID NO 57
; LENGTH: 253
; TYPE: PRT
; ORGANISM: Homo sapiens
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: Incyte ID No. US20020119463A1 1356895CD1
US-09-919-172-57

Query Match      87.9%  Score 51; DB 10; Length 253;
Best Local Similarity 69.2%  Pred. No. 0.0088;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 QVYXXPXDXXXNQ 13
| | | | | | | |
Db 160 QVYXXPMDEYSNQ 172

RESULT 9
US-09-943-906-2
; Sequence 2, Application US/09943906
; Patent No. US20020150571A1
; GENERAL INFORMATION:
; APPLICANT: Prubiner, Stanley B.
```

```
Williamson, R. Anthony
Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PRP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/943,906
FILING DATE: 30-Aug-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/550,374
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX: <Unknown>
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 253 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 2:
US-09-943-906-2

Query Match      87.9%  Score 51; DB 10; Length 253;
Best Local Similarity 69.2%  Pred. No. 0.0088;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

QY 1 QVYXXPXDXXXNQ 13
| | | | | | | |
Db 160 QVYXXPMDEYSNQ 172

RESULT 10
US-10-106-574-5
; Sequence 5, Application US/10106574
; Patent No. US20020164335A1
; GENERAL INFORMATION:
; APPLICANT: Harris, David A.
; TITLE OF INVENTION: Compositions and Methods for the Study and Diagnosis of Prion
; FILE REFERENCE: 09789280.0003
; CURRENT APPLICATION NUMBER: US/10/106,574
; CURRENT FILING DATE: 2002-03-26
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: Patentin version 3.1
; SEQ ID NO 5
; LENGTH: 254
; TYPE: PRT
; ORGANISM: Murinae gen. sp.
US-10-106-574-5

Query Match      87.9%  Score 51; DB 9; Length 254;
Best Local Similarity 69.2%  Pred. No. 0.0088;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;
```

OY 1 QVYXPXDXYXNQ 13
| | | | |
Db 159 QVYRPVDOYSNQ 171

RESULT 11
US-10-106-574-6

Sequence 6, Application US/10106574
Patent No. US20020164335A1
GENERAL INFORMATION:
APPLICANT: Harris, David A.
APPLICANT: Stewart, Richard S.
TITLE OF INVENTION: Compositions and Methods for the Study and Diagnosis of Prion Dis
FILE REFERENCE: 09789280.0003
CURRENT APPLICATION NUMBER: US/10/106,574
CURRENT FILING DATE: 2002-03-26
NUMBER OF SEQ ID NOS: 8
SOFTWARE: PatentIn version 3.1
SEQ ID NO 6
LENGTH: 254
TYPE: PRT
ORGANISM: Murinae gen. sp.
US-10-106-574-6

Query Match
Best Local Similarity 69.2%; Score 51; DB 9; Length 254;
Pred. No. 0.0088;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXPXDXYXNQ 13
| | | | |
Db 159 QVYRPVDOYSNQ 171

RESULT 12
US-10-106-574-7

Sequence 7, Application US/10106574
Patent No. US20020164335A1
GENERAL INFORMATION:
APPLICANT: Harris, David A.
APPLICANT: Stewart, Richard S.
TITLE OF INVENTION: Compositions and Methods for the Study and Diagnosis of Prion Dis
FILE REFERENCE: 09789280.0003
CURRENT APPLICATION NUMBER: US/10/106,574
CURRENT FILING DATE: 2002-03-26
NUMBER OF SEQ ID NOS: 8
SOFTWARE: PatentIn version 3.1
SEQ ID NO 7
LENGTH: 254
TYPE: PRT
ORGANISM: Murinae gen. sp.
US-10-106-574-7

Query Match
Best Local Similarity 69.2%; Score 51; DB 9; Length 254;
Pred. No. 0.0088;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXPXDXYXNQ 13
| | | | |
Db 159 QVYRPVDOYSNQ 171

RESULT 13
US-10-106-574-8

Sequence 8, Application US/10106574
Patent No. US20020164335A1
GENERAL INFORMATION:
APPLICANT: Harris, David A.
APPLICANT: Stewart, Richard S.
TITLE OF INVENTION: Compositions and Methods for the Study and Diagnosis of Prion Dis
FILE REFERENCE: 09789280.0003
CURRENT APPLICATION NUMBER: US/10/106,574
CURRENT FILING DATE: 2002-03-26
NUMBER OF SEQ ID NOS: 8

SOFTWARE: PatentIn version 3.1
SEQ ID NO 8
LENGTH: 254
TYPE: PRT
ORGANISM: Murinae gen. sp.
US-10-106-574-8

Query Match
Best Local Similarity 69.2%; Score 51; DB 9; Length 254;
Pred. No. 0.0088;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXPXDXYXNQ 13
| | | | |
Db 159 QVYRPVDOYSNQ 171

RESULT 14
US-09-943-906-1

Sequence 1, Application US/09943906
Patent No. US20020150571A1
GENERAL INFORMATION:
APPLICANT: Prusiner, Stanley B.
Williamson, R. Anthony
Burton, Dennis R.
TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025

COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/943,906
FILING DATE: 30-Aug-2001
CLASSIFICATION: <Unknown>
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/550,374
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX: <Unknown>

INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 254 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 1:

US-09-943-906-1

Query Match
Best Local Similarity 69.2%; Score 51; DB 10; Length 254;
Pred. No. 0.0088;
Matches 9; Conservative 0; Mismatches 4; Indels 0; Gaps 0;

OY 1 QVYXPXDXYXNQ 13
| | | | |
Db 159 QVYRPVDOYSNQ 171

RESULT 15

US-09-943-906-4

: Sequence 4, Application US/09943906
: Patent No. US20020150571A1

GENERAL INFORMATION:

APPLICANT: Prusiner, Stanley B.
Williamson, R. Anthony

TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP

NUMBER OF SEQUENCES: 86

CORRESPONDENCE ADDRESS:

ADDRESSEE: Fish & Richardson P.C.

STREET: 2200 Sand Hill Road

CITY: Menlo Park

STATE: CA

COUNTRY: U.S.A.

ZIP: 94025

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette

COMPUTER: IBM Compatible

OPERATING SYSTEM: DOS

SOFTWARE: FASTSEQ Version 2.0

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/943,906

FILING DATE: 30-Aug-2001

CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 09/550,374

FILING DATE: <Unknown>

ATTORNEY/AGENT INFORMATION:

NAME: Bozicevic, Karl

REGISTRATION NUMBER: 28,807

REFERENCE/DOCKET NUMBER: 06510/059001

TELECOMMUNICATION INFORMATION:

TELEPHONE: 415-854-5277

TELEFAX: 415-854-0875

TELEX: <Unknown>

INFORMATION FOR SEQ ID NO: 4:

SEQUENCE CHARACTERISTICS:

LENGTH: 255 amino acids

TYPE: amino acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: peptide

SEQUENCE DESCRIPTION: SEQ ID NO: 4:

US-09-943-906-4

Query Match

Best Local Similarity 87.9%; Score 51; DB 10; Length 255;

Matches 9; Conservative 0; Mismatches 4; Indels 0;

Db 162 QVYYPVQKSNQ 174

Search completed: March 24, 2003, 17:25:05
Job time: 12.6458 secs

1

2

3

GenCore version 5.1.4_p5_4578
Copyright (c) 1993 - 2003 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: March 24, 2003, 17:16:57 ; Search time 37.1042 Seconds
(without alignments)
46.686 Million cell updates/sec

```
Title: US-09-508-828B-3
Perfect score: 51
Sequence: 1 CXTQYXXESXAY 13
```

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 908470 seqs, 133250620 residues

Total number of hits satisfying chosen parameters: 908470

```
Minimum DB seq length: 0
Maximum DB seq length: 20000000000
```

```
Post-processing:  Minimum Match 0%
                  Maximum Match 100%
                  Listing first 45 summaries
```

Database : A_Geneseq_101002.*

1:	/SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1980.DAT.*
2:	/SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1981.DAT.*
3:	/SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1982.DAT.*
4:	/SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1983.DAT.*
5:	/SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1984.DAT.*
6:	/SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1985.DAT.*
7:	/SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1986.DAT.*
8:	/SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1987.DAT.*
9:	/SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1988.DAT.*
10:	/SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1989.DAT.*
11:	/SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1990.DAT.*
12:	/SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1991.DAT.*
13:	/SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1992.DAT.*
14:	/SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1993.DAT.*
15:	/SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1994.DAT.*
16:	/SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1995.DAT.*
17:	/SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1996.DAT.*
18:	/SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1997.DAT.*
19:	/SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1998.DAT.*
20:	/SIDS1/gcgdata/geneseq/geneseqp-emb1/AA1999.DAT.*
21:	/SIDS1/gcgdata/geneseq/geneseqp-emb1/AA2000.DAT.*
22:	/SIDS1/gcgdata/geneseq/geneseqp-emb1/AA2001.DAT.*
23:	/SIDS1/gcgdata/geneseq/geneseqp-emb1/AA2002.DAT.*

SUMMARIES

Result	No.	Score	Query Match	Length	DB	ID	Description
	1	42	82.4	141	18	AAW17678	Syrian hamster prion
	2	42	82.4	142	20	AAW93807	Musae rprp protein
	3	42	82.4	212	22	AAW30802	Amro acid sequen
	4	42	82.4	250	22	AAW72369	Rabbit prion prote
	5	42	82.4	254	10	AAW3673	Partial nucleotide
	6	42	82.4	254	22	AAW82117	Hamster Prp. Crd
	7	42	82.4	254	22	AAW61773	Hamster prion pro
	8	42	82.4	254	23	AAW15608	Hamster prp prote
	9	42	82.4	257	23	ABW04428	Hamster prion pro
	10	41	80.4	13	23	ABW08378	Mutant immunogeni

11	41	80.4	13	23	ABB08379	Immunogenic peptide
12	41	80.4	15	14	AAK38048	Prlion protein regl
13	41	80.4	17	22	AAB69083	Bovine prion prote
14	41	80.4	19	23	ABBB1632	Prlion mimetic pept
15	41	80.4	22	14	AAK38042	Bovine prion prote
16	41	80.4	22	14	AAK38044	Ovine prion prote
17	41	80.4	22	14	AAK38046	Human prion prote
18	41	80.4	24	14	AAK38040	Human prion prote
19	41	80.4	26	22	AAB69085	Prlion protein regl
20	41	80.4	30	22	AAK74952	Prlion protein pept
21	41	80.4	30	22	AAK74953	Human PrP helix C
22	41	80.4	30	22	AAK74954	Mutant human PrP h
23	41	80.4	30	22	AAK74955	Mutant human PrP h
24	41	80.4	31	20	AAW92806	Mutant human PrP h
25	41	80.4	40	23	ABBB08377	Mouse PrP protein
26	41	80.4	142	18	AAW17686	Bovine prion polyP
27	41	80.4	168	21	AAAB07316	Mouse prion prote
28	41	80.4	208	21	AAAB07318	Human prion prote
29	41	80.4	208	21	AAAB07337	Mouse prion prote
30	41	80.4	208	21	AAAB07339	Human prion prote
31	41	80.4	211	22	AAAB30801	Human prion prote
32	41	80.4	217	22	AAAB07317	Amino acid sequenc
33	41	80.4	217	21	AAAB07317	Cattle prion prote
34	41	80.4	219	19	AAW70261	Cattle prion prote
35	41	80.4	219	20	AAW93571	Bovine prion prote
36	41	80.4	245	22	AAK72342	Bovine tbPP prote
37	41	80.4	245	22	AAK72352	Monkey prion prote
38	41	80.4	253	17	AAK86715	Cereophtic prion p
39	41	80.4	253	19	AAW69660	Human prion prote
40	41	80.4	253	20	AAV07994	Human prion prote
41	41	80.4	253	21	AAW85901	Human prion prote
42	41	80.4	253	21	AAAB15035	Human prion prote
43	41	80.4	253	21	AAAB06272	Human PrP prion pr
44	41	80.4	253	21	AAV61485	Human prion prote
45	41	80.4	253	22	AAK65853	Human prion prote

ALIGNMENTS

RESULT 1	ID	AAW17678	standard; peptide; 141 AA.
XX	AAW17678;		
XX	14-JAN-1998	(first entry)	
XX	Syrian hamster prion protein peptide Sha 90-231.		
XX	Prion protein; PrP; alpha helical domain; screening; inhibition; binding; scrapie; bovine spongiform encephalopathy; BSE; CJD; Creutzfeldt-Jakob disease; kuru; GSS; FFI; fatal familial insomnia; Gerstmann-Strausner-Scheinker disease; hamster; human.		
XX	Mesocricetus auratus.		
XX	W09716728-A1.		
XX	09-MAY-1997.		
XX	28-OCT-1996;	96MO-US17462.	
XX	02-NOV-1995;	95US-0556623.	
XX	(REGC) UNIV CALIFORNIA.		
XX	Cohen FE, Kaneko K, Prusiner SB;		
XX	WPI; 1997-272248/24.		
XX	Prion proteins (PrPs) having at least one alpha-helical domain - used in assays for screening compounds able to inhibit or decrease		

PT the binding of PrP peptide(s) to cellular prion proteins or
 XX peptide(s)
 XX
 PS Claim 11; Page 35-36; 50pp; English.
 CC The present sequence represents a prion protein (PrP) peptide from
 CC Syrian hamster. PrP has an ability to induce a conformational change
 CC in cellular prion protein (PrP^C). Methods, for screening compounds
 CC which inhibit the binding of PrP^C to a PrP peptide, are used for
 CC screening for drugs that may be useful in the treatment prion-related
 CC disease e.g. scrapie, BSE (bovine spongiform encephalopathy), CJD
 CC (Creutzfeldt-Jakob disease), Kuru, GSS (Gerstmann-Strausler-Scheinker
 CC disease) and FFI (fatal familial insomnia).
 XX
 SQ Sequence 141 AA;
 Query Match 82.4%; Score 42; DB 18; Length 141;
 Best Local Similarity 61.5%; Pred. No. 0.077;
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
 OY 1 CXTQYXXESXAXY 13
 DB 124 CTTQYQKESQAYY 136
 RESULT 2
 AAM92807
 ID AAM92807 standard; protein; 142 AA.
 AC AAM92807;
 DT 07-MAY-1999 (first entry)
 DE Mouse rPrP protein fragment.
 XX
 KW Murine; prion protein; PPMF; prion protein modulator factor; PrP;
 KW PrP(c); PrP(sc); scrapie; isoform; pathogenic; inhibitor; screening;
 KW disease resistance; transgenic.
 XX
 OS Mus sp.
 PN W09855132-A1.
 PD 10-DEC-1998.
 XX
 PF 18-MAY-1998; 98WO-US10104.
 PR 12-MAY-1998; 98US-0076606.
 PR 02-JUN-1997; 97US-0868162.
 PA (REGC) UNIV CALIFORNIA.
 PI Cohen FE, James TL, Kaneko K, Prusiner SB;
 DR WPI: 1999-080819/07.
 XX
 PT Novel Prion Protein Modulation Factor(s) - useful to increase speed
 PT and sensitivity of assays to detect pathogenic prion proteins
 XX
 PS Disclosure: Fig 6A-B; 93pp; English.
 CC This invention describes a composition of Prion Protein Modulation
 CC Factor (PPMF) which binds the prion protein PrP(c) and facilitates a
 CC conformational change from PrP(c) to the scrapie isoform of the PrP
 CC protein, PrP(sc). PPMF is involved in complex formation as the rate
 CC limiting step. The protein can therefore be used in assays to
 CC "speed up" formation of the complex and conversion of prion proteins
 CC to the pathogenic stage and thus can be used to rapidly detect the
 CC presence of pathogenic prion proteins in a sample. The compositions
 CC can be used to screen for compounds that inhibit PrP(sc) formation.
 CC The gene can also be used to generate transgenic animals which are
 CC resistant to prion diseases.

SQ Sequence 142 AA;
 Query Match 82.4%; Score 42; DB 20; Length 142;
 Best Local Similarity 61.5%; Pred. No. 0.077;
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
 OY 1 CXTQYXXESXAXY 13
 DB 125 CTTQYQKESQAYY 137
 RESULT 3
 AAB30802
 ID AAB30802 standard; Protein; 212 AA.
 AC AAB30802;
 DT 02-APR-2001 (first entry)
 DE Amino acid sequence of a Syrian hamster prion protein.
 XX
 KW SCHAG: self-coalesce; higher-order aggregate; amyloidogenic domain;
 KW aggregation; fibril; phenotypic alteration; gene therapy;
 KW disease resistance; plant pigmentation; prion disease.
 XX
 OS Mesocricetus auratus.
 OS
 PN W0200075324-A2.
 PD 14-DEC-2000.
 XX
 PF 09-JUN-2000; 2000WO-US15876.
 PR 09-JUN-1999; 99US-0138833.
 PA (ARCH-) ARCH DEV CORP.
 PI Lindquist S, Li L, Ma J, Liu J, Sondheimer N, Scheibel T;
 DR WPI: 2001-061723/07.
 DR N-PSDB; AAC86687.
 XX
 PT New nucleic acid encoding chimeric proteins with self-assembly
 PT properties, useful e.g. for diagnosis and treatment of prion diseases,
 PT also related aggregates, fibrils and polymers -
 XX
 PS Claim 11; Page 139-140; 188pp; English.
 CC The present sequence represents a prion protein. The specification
 CC describes chimeric polypeptides, which comprise at least one SCHAG
 CC (self-coalesces into higher-order aggregates) amino acid sequence fused
 CC in frame with a polypeptide of interest (which is other than a marker
 CC protein, a glutathione-S-transferase or a staphylococcal nuclear
 CC protein). The specification also describes chimeric polypeptides that
 CC comprises an amyloidogenic domain that causes aggregation into fibrils.
 CC The chimeric polypeptides are used to prepare polymers with multiple
 CC reactivities, e.g. derivatised with enzymes, or specific binding
 CC partners, and useful e.g. for performing multi-step chemical reactions.
 CC They can be used create an inducible, or stable phenotypic alteration
 CC in a cell, e.g. for gene therapy, protein production, imparting disease
 CC resistance to plants, altering plant pigmentation and for diagnosis
 CC and treatment of prion diseases.
 XX
 SQ Sequence 212 AA;
 Query Match 82.4%; Score 42; DB 22; Length 212;
 Best Local Similarity 61.5%; Pred. No. 0.12;
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
 OY 1 CXTQYXXESXAXY 13
 DB 194 CTTQYQKESQAYY 206

RESULT 4										
AAB72369	AAB72369 standard; Peptide: 250 AA.									
ID	AAB72369 standard; Peptide: 250 AA.									
AC	AAB72369;									
XX										
DT	17-MAY-2001 (first entry)									
XX										
DE	Rabbit prion protein cellular form (PrPc) amino acid sequence.									
XX										
KW	Prion protein; cellular form; PrPc; stable region; antibody; BSE; CJD;									
KM	prion disease; spongiform encephalopathies; Scrapie; rabbit;									
XX	bovine spongiform encephalopathy; BSE; Creutzfeldt-Jakob disease.									
XX										
OS	Oryctolagus cuniculus.									
XX										
PH										
FT	Key									
FT	Region									
FT	Location/Qualifiers									
FT	176..221									
FT	/note="Stable region, specifically claimed in claim 3"									
PN	WO200107479-A2.									
XX										
PD	01-FEB-2001.									
XX										
PF	25-JUL-2000; 2000WO-G802873.									
XX										
PR	27-JUL-1999; 99GB-0017491.									
PR	30-JUL-1999; 99GB-0017878.									
XX										
PA	(IMCO-) IMPERIAL COLLEGE INNOVATIONS LTD.									
XX										
PI	Collange J, Clarke AR, Waltno JP, Jackson GS, Hosszu LP;									
PI	WPI: 2001-168538/17.									
XX										
PT	New prion peptide for treating, preventing and/or diagnosing prion									
PT	diseases e.g. scrapie in sheep, bovine spongiform encephalopathies in									
PT	cows and Creutzfeldt-Jakob disease in humans									
XX										
PS	Claim 3; Fig 5: 69pp; English.									
XX										
CC	This invention relates to a peptide fragment of a cellular form of prion									
CC	protein PrPc located around a disulphide bond found in PrPc. The stable									
CC	structure is a specific marker of PrPc but not soluble prion protein									
CC	(PrPsc). The PrPc peptide sequences can be used to generate an antibody									
CC	or binding agent that binds PrPc. The antibody is used to detect or									
CC	remove PrPc, and may be used in preventative medicine. The antibody may									
CC	be used in the prevention, treatment or diagnosis of a prion disease,									
CC	e.g. spongiform encephalopathies, such as scrapie in sheep, bovine									
CC	spongiform encephalopathies (BSE) in cows, and Creutzfeldt-Jakob disease									
CC	(CJD) in humans. The present sequence represents the cellular form of									
CC	rabbit prion protein, the stable region of the protein may be used									
CC	in the production of anti-PrPc antibodies.									
XX										
XX										
SQ	Sequence 250 AA;									
XX										
Query Match	82.4%; Score 42; DB 22; Length 250;									
Best Local Similarity	61.5%; Pred. No. 0.14;									
Matches	8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;									
OY	1 CXTGYXSESXAXY 13									
Db	211 CXTGYXSESXAXY 223									
XX										
RESULT 5										
AAP93673	AAP93673 standard; protein: 254 AA.									
ID	AAP93673 standard; protein: 254 AA.									
XX										
XX	AAP93673;									
DT	31-MAY-1990 (first entry)									

XX	Partial nucleotide sequence of Hamster PrP gene.
DE	
XX	Scrapie; PrP gene; Bovine spongiform encephalopathy; BSE;
KW	scrapie associated fibrils; Ssf.
XX	
OS	Cricetus sp.
XX	
PN	MO8911545-A.
XX	
PD	30-NOV-1989.
XX	
PE	15-MAY-1989; 89WO-G800522.
XX	
PR	17-MAY-1988; 88GB-0011608.
XX	
PA	(ANIM-) ANIMAL HEALTH LTD.
XX	
PI	Hope J, Hunter N;
XX	
DR	WPI: 1989-370736/50.
XX	
DR	N-PSDB; AAN92724.
XX	
PT	Detecting susceptibility to scrapie in sheep, cattle and goats -
PT	by analysing blood or tissue for polymorphism linked to
PT	susceptibility, pref. using DNA hybridisation probe.
XX	
PS	Disclosure; : 46pp; English.
XX	
CC	Product of partial hamster PrP gene, which is sufficiently similar to
CC	the sheep sip gene (scrapie susceptibility), that the probe (pEA974) can
CC	be made to the site.
CC	See also AAN92735.
XX	
SQ	Sequence 254 AA;
OY	1 CXTGYXESXAY 13
DB	214 CTTGYKESQAY 226
RESULT 6	
AAB82117	
ID	AAB82117 standard; Protein; 254 AA.
XX	
AC	AAB82117;
XX	
DT	29-JUN-2001 (first entry)
XX	
DE	Hamster PrP.
XX	
KW	Hamster; PrP; cerebroprotective; PrP conversion inhibitor; prion protein;
KW	transmissible spongiform encephalopathy; TSE; neurodegenerative disease;
KW	prion-sensitive prion protein; PrPsen;
KW	protease-resistant prion protein; PrPres.
XX	
OS	Cricetus griseus.
XX	
PN	US6211149-B1.
XX	
PD	03-APR-2001.
XX	
PF	03-AUG-1998; 98US-0128450.
XX	
PR	03-AUG-1998; 98US-0128450.
XX	
PA	(USSH) US DEPT HEALTH & HUMAN SERVICES.
XX	
PI	Chesebro BW, Caughey BW, Chabry J, Priola S;

XX WPI; 2001-315407/33.
 DR N-PSDB; AAF86478.
 XX
 PT New peptide comprises hamster prion protein fragment that inhibits
 PT conversion of prion protein from protease-sensitive to
 PT protease-resistant form, useful for diagnosis and treatment of
 PT spongiform encephalopathies -
 XX
 XX Disclosure; Column 39-42; 31pp; English.
 XX
 CC Transmissible spongiform encephalopathies (TSE) are fatal
 CC neurodegenerative diseases. These diseases are characterised by the
 CC formation and accumulation, in the brain, of an abnormal proteinase K
 CC resistant isoform (PrPres) of a normal protease-sensitive host-encoded
 CC prion protein (PrPsen). The present invention relates to peptides
 CC comprising a hamster, human or murine prion protein (PrP) fragment which
 CC specifically inhibit the conversion of protease-sensitive prion protein
 CC (PrPsen) to protease-resistant prion protein (PrPres). The present
 CC sequence is the protein sequence for hamster PrP. The peptides of the
 CC present invention are useful for diagnosis and treatment of TSE
 CC diseases.

XX Sequence 254 AA;

Query Match 82.4%; Score 42; DB 22; Length 254;
 Best Local Similarity 61.5%; Pred. No. 0.14;
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

YY 1 CXTQYXXESXAXY 13
 |||||
 DB 214 CTTQYKESQAYY 226

RESULT 7

ID AAB61773 standard; protein; 254 AA.

AC AAB61773;

DT 20-APR-2001 (first entry)

DE Hamster prion protein (PrP) sequence.

XX Pilon; neuroprotective; vaccine; prion protein peptide; PrP; PrPSc;
 KW Immunisation; antigenic; antibody; Creutzfeldt-Jakob disease; CJD;
 KW Kuru; Gerstmann-Strausler syndrome; fatal familial insomnia; scrapie;
 KW spongiform encephalopathy; hamster.
 XX

OS Mesocricetus auratus.

PN W0200078344-A1.

PD 28-DEC-2000.

PF 23-JUN-2000; 2000WO-US17455.

PR 23-JUN-1999; 99US-0140634.

PA (CAPR-) CAPRION PHARM INC.

PI Cashman NR, Paramithiotis E, Slon-Usakiewicz J, Haghighat A;
 PI Plamad M;

XX WPI; 2001-102614/11.

XX New antibody for diagnosing, preventing and treating prion diseases
 PT such as Creutzfeldt-Jakob disease, Kuru, insomnia in human and
 PT livestock species -
 XX

XX Disclosure; Fig 2; 81pp; English.

XX The invention relates to an antibody (I) that binds with high-binding

CC affinity to a YXX epitope of a mammalian prion protein peptide (PrP),
 CC PrPSc. (I) is useful for detecting PrPSc in a biological sample such as
 CC a tissue or cell, their extracts, a bodily fluid or a biopsy from a
 CC human, livestock species, or a pet species, by forming a complex between
 CC PrPSc and (I). (I) is useful for preventing or treating a PrPSc disease
 CC in a mammal, for decontaminating PrPSc from a biological sample or for
 CC inhibiting PrPSc in a biological sample, where the sample is perfused
 CC with the antibody. A vaccine comprising (I) or a peptide that has
 CC antigenicity as a PrPSc is useful for immunizing a mammal against PrPSc
 CC disease. Such antigenic peptides and synthetic peptides are useful as
 CC immunogens for generating antibodies specific for PrPSc. The prion
 CC diseases that can be diagnosed or treated include Creutzfeldt-Jakob
 CC disease (CJD), variant CJD, iatrogenic CJD, familial CJD, Kuru, Gerstmann
 CC -Strausler syndrome and fatal familial insomnia in humans, scrapie in
 CC sheep and goats and spongiform encephalopathy in cattle. The present
 CC sequence represents a hamster prion protein amino acid sequence.

XX Sequence 254 AA;

Query Match 82.4%; Score 42; DB 22; Length 254;
 Best Local Similarity 61.5%; Pred. No. 0.14;
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

YY 1 CXTQYXXESXAXY 13
 |||||
 DB 214 CTTQYKESQAYY 226

RESULT 8

ID AAE15608 standard; protein; 254 AA.

AC AAE15608;

DT 12-MAR-2002 (first entry)

DE Hamster PrP protein.

XX Protease resistant prion protein; PrPres; Creutzfeldt-Jakob disease;
 KW Protease sensitive prion protein; PrPsen; therapy; neuroprotectant;
 KW Transmissible spongiform encephalopathy; fatal familial insomnia;
 KW Gerstmann-Strausler-Scheinker syndrome; scrapie; kuru; hamster.
 XX

OS Cricetus sp.

PN US2001041790-A1.

PD 15-NOV-2001.

PF 30-MAR-2001; 2001US-0823494.

PR 12-MAY-1998; 98US-085160P.

PR 03-AUG-1998; 98US-0128450.

PA (USSH) US DEPT HEALTH & HUMAN SERVICES.

PI Chesebro BW, Caughey BW, Chabry J, Priola S;

PI WPI; 2002-065984/09.

DR N-PSDB; AAD24906.

XX Peptides which can inhibit conversion of prion proteins from protease
 PT sensitive to protease resistant forms, are useful in treating
 PT transmissible spongiform encephalopathies -
 XX

XX Disclosure; Page 22; 33pp; English.

XX The present invention relates to peptides comprising a peptide region of
 CC prion protein (PrP) and which are capable of inhibiting conversion of
 CC protease sensitive prion protein (PrPsen) to protease resistant prion
 CC protein (PrPres). The peptides are useful for inhibiting formation of
 CC protease resistant prion proteins, such as those associated with
 CC transmissible spongiform encephalopathies, e.g., Creutzfeldt-Jakob

CC disease, kuru, Gerstmann-Strausler-Scheinker syndrome, fatal familial
 CC insomnia or scrapie. The peptides can be used as diagnostic agents, e.g.,
 CC to detect the presence of PrP^{sc} in body fluids such as blood. They may
 CC also be used to treat or prevent diseases such as the above. They may
 CC also be used to design analogues, derivatives or mimetics for use as
 CC inhibitors of conversion of PrP^{sc} to PrP^{sc}. The present sequence is
 CC hamster PrP protein.

XX Sequence 254 AA;

Query Match 82.4%; Score 42; DB 23; Length 254;
 Best Local Similarity 61.5%; Pred. No. 0.14;
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTQYXXESXAXY 13
 DB 214 CTTQYKESQAYY 226

RESULT 9

ABR04428 standard; Protein; 257 AA.

XX ABR04428;

XX 04-MAR-2002 (first entry)

XX Hamster prion protein PrP.

XX Hamster prion protein PrP; anti-HIV; prion disease; kuru;

XX antibacterial; neuroprotective; anti-HIV; Creutzfeldt-Jakob disease;

XX Gerstmann-Strausler-Scheinker disease; fatal familial insomnia;

XX bovine spongiform encephalitis; scrapie; virucide.

XX Cricetus griseus.

XX NC0200183747-A2.

XX 08-NOV-2001.

XX 30-APR-2001; 2001WO-FR01336.

XX 28-APR-2000; 2000FR-0005535.

XX (INRM) INSERM INST NAT SANTE & RECH MEDICALE.

XX Leblanc P, Darlix J, Gabus-Darlix C;

XX WPI: 2002-049350/06.

XX New polypeptides, useful as antiviral agents, comprise their prion

XX proteins able to bind nucleic acid, nucleocapsid proteins, and ligands

XX for use as anti-prion agents -

XX Disclosure; Fig 9; 80pp; French.

XX The present invention relates to normal (PrP^c) or abnormal (PrP^{sc}) human

XX or animal prion proteins which are able to bind to DNA or RNA.

XX particularly of viral, especially retroviral, origin and to nucleocapsid

XX proteins (NCP) of human or animal retroviruses. These can be used as

XX antiviral agents, particularly against human immune deficiency virus

XX (HIV), and in the treatment of prion diseases including Creutzfeldt-Jakob

XX disease, Gerstmann-Strausler-Scheinker disease, fatal familial

XX insomnia, kuru, bovine spongiform encephalitis and scrapie. The present

XX sequence is the hamster PrP protein sequence.

DB 217 CTTQYKESQAYY 229

RESULT 10

ABR08378 standard; peptide; 13 AA.

XX ABR08378;

XX 22-APR-2002 (first entry)

XX Mutant immunogenic peptide derived from bovine prion protein.

XX Prion; BSE; bovine spongiform encephalopathy; vCJD;

XX new variant Creutzfeldt-Jakob disease; scrapie; TSE;

XX transmissible spongiform encephalopathy; antibody; PrP^{sc}; PrP^c; vaccine;

XX CJD; Creutzfeldt-Jakob disease; cow.

XX Bos taurus.

XX Key location/Qualifiers

XX MISC-difference 6

XX EP1158003-A1.

XX 28-NOV-2001.

XX 23-MAY-2000; 2000EP-0111108.

XX 23-MAY-2000; 2000EP-0111108.

XX (BLOO-) BLOOD TRANSFUSION CENT SLOVENIA.

XX Curin-Serbec V;

XX WPI: 2002-107827/15.

XX New antibody, useful in diagnosis and treatment of BSE, CJD, new

XX variant CJD and other Transmissible Spongiform Encephalopathy related

XX diseases, selectively binds to the infectious form of the prion protein

XX Claim 3; Page 10; 21pp; English.

XX The invention relates to an antibody selectively binding to the three

XX dimensional conformation of the C-terminal of the infectious 'scrapie'

XX (PrP^{sc}) isoform of the prion protein (or a part), but not binding to the

XX structure of the C-terminal of the normal cellular (PrP^c) isoform of

XX the prion protein. The antibodies (or functional parts) are useful in the

XX diagnosis of Bovine Spongiform Encephalopathy (BSE), Creutzfeldt-Jakob

XX Disease (CJD), new variant form CJD (vCJD) and other Transmissible

XX Spongiform Encephalopathy (TSE) related diseases e.g. in humans, cows,

XX sheep etc., since they can differentiate between the infectious (PrP^{sc})

XX isoform and the normal cellular (PrP^c) isoform of the prion protein.

XX They are also useful in the treatment of such diseases. They may be

XX included in pharmaceutical compositions or used to produce drugs or

XX active and/or passive vaccines against diseases as above. The

XX antibody antibodies of the polypeptides of the invention may also

XX be used to produce drugs or vaccines against such diseases. The current

XX sequence represents a mutant immunogenic peptide derived from bovine

XX prion protein C-terminal region (see ABR08377). This sequence is created

XX from the wild-type sequence by replacement of the Gln residue at position

XX 6 of the peptide with Glu. This sequence has proven to elicit an immune

XX response sufficiently strong enough to be capable of easily raising

XX antibodies specifically against PrP^{sc}.

XX Sequence 13 AA;

Query Match 80.4%; Score 41; DB 23; Length 13;
 Best Local Similarity 61.5%; Pred. No. 0.01;
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTGYXXESXAXY 13
 DB 1 CITOYERESQAYY 13

RESULT 11

ABB08379 standard; peptide; 13 AA.

ABB08379;

22-APR-2002 (first entry)

Immunogenic peptide derived from bovine prion protein.

Prion; BSE; bovine spongiform encephalopathy; vCJD;

new variant creutzfeldt jacob's disease; scrapie; TSE;

transmissible spongiform encephalopathy; antibody; PrPsc; PrPc; vaccine;

CJD; creutzfeldt jacob's disease; cow.

Bos taurus.

EP1158003-A1.

28-NOV-2001.

23-MAY-2000; 2000EP-0111108.

23-MAY-2000; 2000EP-0111108.

(BLOO-) BLOOD TRANSFUSION CENT SLOVENIA.

CurIn-Serbec V;

WPI; 2002-107827/15.

New antibody, useful in diagnosis and treatment of BSE, CJD, new variant CJD and other Transmissible Spongiform Encephalopathy related diseases, selectively binds to the infectious form of the prion protein

Claim 18; Page 11; 21pp; English.

The invention relates to an antibody selectively binding to the three dimensional conformation of the C-terminal of the infectious 'scrapie' (PrPsc) isoform of the prion protein (or a part), but not binding to the structure of the C-terminal of the normal cellular (PrPc) isoform of the prion protein. The antibodies (or functional parts) are useful in the diagnosis of Bovine Spongiform Encephalopathy (BSE), Creutzfeldt Jacobs Disease (CJD), new variant form CJD (vCJD) and other Transmissible Spongiform Encephalopathy (TSE) related diseases e.g. in humans, cows, sheep etc., since they can differentiate between the infectious (PrPsc) isoform and the normal cellular (PrPc) isoform of the prion protein. They are also useful in the treatment of such diseases. They may be included in pharmaceutical compositions or used to produce drugs or active and/or passive vaccines against diseases as above. The anti-idiotypic antibodies of the polypeptides of the invention may also be used to produce drugs or vaccines against such diseases. The current sequence represents an immunogenic peptide derived from bovine prion protein C-terminal region (see ABB08377).

Sequence 13 AA;

Query Match 80.4%; Score 41; DB 23; Length 13;

Best Local Similarity 61.5%; Pred. No. 0.01; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTGYXXESXAXY 13
 DB 1 CITOYERESQAYY 13

RESULT 12

AAR38048 standard; protein; 15 AA.

AAR38048;

14-OCT-1993 (first entry)

Prion protein region F #2.

Antigen; prion; protein; region; frame shift; repeat; mutation; PrPc;

Fsa; Fsb; subfragment; antibody; treatment; spongiform encephalopathy;

human; sheep; cattle; cellular binding; aggregation; mammal; scrapie;

immune system; PrPac; ratio-inverso peptide; enzymatic degradation;

resistance.

Synthetic.

WO9311155-A.

10-JUN-1993.

03-DEC-1992; 92WO-GB02246.

03-DEC-1991; 91GB-0025747.

10-JUL-1992; 92GB-0014663.

(PROT-) PROTEUS MOLECULAR DESIGN LTD.

Fishleigh RV, Mee RP, Robson B;

WPI; 1993-196994/24.

New polypeptide(s) contg. antigenic site of prion protein -

useful for treatment and diagnosis of mammalian encephalopathies

e.g. Creutzfeldt-Jacob disease and kuru

Claim 29; Page 74; 82pp; English.

The sequences given in AAR38041-48 represent polypeptides which are derived from an antigenic site, region F, of a prion protein. Prion proteins comprise six regions of interest (A-F), and two related frame shift peptides sequences caused by a repeating section in region E or -1 (FSb). These peptides (see also AAR38041-48) and antibodies raised against these may be used to treat or prevent spongiform encephalopathy in humans, sheep or cattle. They can be used to block cellular binding and aggregation of prion proteins and to stimulate the mammalian immune system. These peptides may be used to distinguish between the normal form of prion protein (PrPc) and the scrapie-associated form (PrPac). These peptides may include rare or synthetic amino acids or a ratio-inverso peptide modification to improve resistance to enzymatic degradation.

Sequence 15 AA;

Query Match 80.4%; Score 41; DB 14; Length 15;

Best Local Similarity 61.5%; Pred. No. 0.012; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTGYXXESXAXY 13
 DB 1 CITOYERESQAYY 13

RESULT 13

AAB69083 standard; peptide; 17 AA.

AAB69083;

23-APR-2001 (first entry)

DE Bovine prion protein peptide SEQ ID NO:3.
 XX Monoclonal antibody; detection; prion protein; TSE; infection;
 XX Transmissible spongiform encephalopathy; scrapie; bovine encephalopathy;
 KW Chronic wasting disease; PrP-Sc.
 XX
 OS Bos taurus.
 XX
 PN WO200105426-A1.
 XX
 PD 25-JAN-2001.
 XX
 PF 14-JUL-2000; 2000WO-US19211.
 XX
 PR 15-JUL-1999; 99US-0353348.
 XX
 PA (USDA) US DEPT OF AGRICULTURE.
 XX
 PI O'Rourke KI;
 XX
 DR WPI; 2001-159477/16.
 XX
 PT Monoclonal antibodies for detecting prior proteins as an indication of
 PT transmissible spongiform encephalopathies, specifically binds to
 PT conserved group of prior proteins -
 XX
 PS Example 2; Page 12; 25pp; English.
 XX
 CC The present invention describes a monoclonal antibody (I) which
 CC specifically binds to a conserved epitope of prion proteins, which is
 CC capable of binding prion protein (PrP)-Sc protein in fixed or unfixed
 CC tissue that has been treated to unmask the group to PrP-Sc protein and
 CC eliminate availability of a corresponding group of PrP-Cellular. (I) can
 CC be used in immunoassays to detect PrP-Sc proteins in animal or human,
 CC including ruminant livestock, cats, mink and non-human primates, sheep,
 CC goat, cattle, mule deer and elk, as an indication of the presence of
 CC transmissible spongiform encephalopathies (TSE). Presence of PrP-Sc
 CC indicates the scrapie, bovine encephalopathy- or chronic wasting
 CC disease-infected animals. The antibodies provide early detection of
 CC PrP-Sc and for preclinical diagnosis of TSE. The present sequence
 CC represents a prion protein peptide which is used in an example from
 CC the present invention.
 XX
 SQ Sequence 17 AA;
 XX
 Query Match 80.4%; Score 41; DB 22; Length 17;
 Best Local Similarity 61.5%; Pred. No. 0.014;
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
 OY 1 CXTGYXXESXAXY 13
 DB 1 CXTGYORESCAYY 13
 XX
 RESULT 14
 ABB81632
 ID ABB81632 standard; peptide; 19 AA.
 XX
 AC ABB81632;
 XX
 DT 25-SEP-2002 (first entry)
 XX
 DE Prion mimetic peptide SEQ ID NO:4.
 XX
 CC Prion mimetic peptide; degradation; detection; TSE; infection;
 CC transmissible spongiform encephalopathy; prion protein; sterilisation;
 CC immunisation; Creutzfeldt-Jacob disease; kuru; fatal familial insomnia;
 CC Gerstmann-Strausler-Scheinker syndrome; chronic wasting disease;
 CC bovine spongiform encephalopathy; feline spongiform encephalopathy;
 CC scrapie; transmissible mink encephalopathy.
 XX
 OS Synthetic.
 XX

PN WO200253723-A2.
 XX
 PD 11-JUL-2002.
 XX
 PF 08-JAN-2002; 2002WO-GB00052.
 XX
 PR 08-JAN-2001; 2001GB-0000420.
 XX
 PR 26-FEB-2001; 2001GB-0004696.
 XX
 PA (MICR-) MICROBIOLOGICAL RES AUTHORITY.
 XX
 PI Raven NDH;
 XX
 DR WPI; 2002-557743/59.
 XX
 PT Inactivating transmissible spongiform encephalopathy (TSE) agent such
 PT as Creutzfeldt-Jacob disease, scrapie, kuru or
 PT Gerstmann-Strausler-Scheinker syndrome involves exposing agent to
 PT thermostable proteolytic enzyme -
 XX
 PS Example; Page 19; 41pp; English.
 XX
 CC The present invention describes a method (M1) for inactivating a
 CC transmissible spongiform encephalopathy (TSE) agent comprising exposing
 CC the TSE agent to a thermostable proteolytic enzyme. Also described:
 CC (1) a composition (I) for inactivating a TSE agent, comprising a
 CC thermostable proteolytic enzyme; (2) an antibody (II) specific for a
 CC prion dimer which does not bind to a prion monomer; and (3) a purified
 CC prion dimer. (M1) is useful for inactivating a TSE agent such as a prion.
 CC A TSE agent is Creutzfeldt-Jacob disease or its variant, kuru, fatal
 CC familial insomnia, Gerstmann-Strausler-Scheinker syndrome, bovine
 CC spongiform encephalopathy, scrapie, feline spongiform encephalopathy,
 CC chronic wasting disease or transmissible mink encephalopathy. (I) is
 CC useful for sterilising material contaminated with the TSE agent. A prion
 CC dimer is useful for examining a sample infected with or suspected to be
 CC infected by a prion protein, and for detecting prion infectivity, by
 CC detecting a prion dimer in the sample. A prion dimer is useful for
 CC producing (II), by immunising an animal with a prion dimer, obtaining its
 CC extract which contains (II), and isolating (II) from the extract. The
 CC method comprises obtaining an antibody preparation containing antibodies
 CC which bind a prion dimer, and removing (II) from the preparation. (M1)
 CC and (I) are useful for inactivating TSE agents in potentially
 CC contaminated clinical waste and culled animal material. (M1) is useful
 CC for sterilising larger surface areas of apparatus, operating tables or
 CC even walls of rooms. The present sequence represents a prion mimetic
 CC peptide which is used in an example from the present invention in the
 CC preparation of antibodies including dimer preferential antibodies.
 XX
 SQ Sequence 19 AA;
 XX
 Query Match 80.4%; Score 41; DB 23; Length 19;
 Best Local Similarity 61.5%; Pred. No. 0.016;
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
 OY 1 CXTGYXXESXAXY 13
 DB 1 CXTGYORESCAYY 13
 XX
 RESULT 15
 AAR38042
 ID AAR38042 standard; protein; 22 AA.
 XX
 AC AAR38042;
 XX
 DT 14-OCT-1993 (first entry)
 XX
 DE Bovine prion protein region F #2.
 XX
 CC Antigen; prion; protein; region; frame shift; repeat; mutation; PrPc;
 CC Fsa; Fsb; subfragment; antibody; treatment; spongiform encephalopathy;
 CC human; sheep; cattle; cellular binding; aggregation; mammal; scrapie;
 CC immune system; PrPsc; ratio-inverso peptide; enzymatic degradation;
 KW

Search completed: March 24, 2003, 17:19:41
 Job time : 37.1042 secs

resistance.
 Synthetic.

Location/Qualifiers

Key
 FT Misc-difference 1 /note= "One or more residues or may be absent"
 FT Misc-difference 2 /note= "May be absent"
 FT Misc-difference 3 /note= "May be absent"
 FT Misc-difference 4 /note= "May be absent"
 FT Misc-difference 5 /note= "May be absent"
 FT Misc-difference 18 /note= "May be absent"
 FT Misc-difference 19 /note= "May be absent"
 FT Misc-difference 20 /note= "May be absent"
 FT Misc-difference 21 /note= "May be absent"
 FT Misc-difference 22 /note= "One or more residue, or may be absent"

W09311155-A.

10-JUN-1993.

03-DEC-1992; 92WO-GB02246.

03-DEC-1991; 91GB-0025747.

10-JUL-1992; 92GB-0014663.

(PROT-) PROTEUS MOLECULAR DESIGN LTD.

Fishleigh RV, Mee RP, Robson B;

WPI; 1993-196994/24.

New polypeptide(s) contg. antigenic site of prion protein -
 useful for treatment and diagnosis of mammalian encephalopathies
 e.g. Creutzfeldt-Jacob disease and Kuru

Claim 28; Page 74; 82pp; English.

The sequences given in AAR38041-48 represent polypeptides which are
 derived from an antigenic site, region F, of a prion protein. Prion
 proteins comprise six regions of interest (A-F), and two related frame
 shift peptides sequences caused by a repeating section in region E
 having a nucleic acid coding sequence frame shift mutation of +1 (FSa)
 or -1 (FSb). These peptides (see also AAR38041-48) and antibodies
 raised against these may be used to treat or prevent spongiform
 encephalopathy in humans, sheep or cattle. They can be used to block
 cellular binding and aggregation of prion proteins and to stimulate the
 mammalian immune system. These peptides may be used to distinguish
 between the normal form of prion protein (PrPc) and the
 scrapie-associated form (PrPsc). These peptides may include rare or
 synthetic amino acids or a ratio- inverse peptide modification to improve
 resistance to enzymatic degradation.

Sequence 22 AA:

Query Match 80.4%; Score 41; DB 14; Length 22;

Best Local Similarity 61.5%; Pred. No. 0.018;

Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 1 CXTGYXESXAY 13

Db 3 CITOYORSOAY 15

GenCore version 5.1.4-p5_4578
Copyright (c) 1993 - 2003 Compugen Ltd.

OM protein - protein search, using sw model

Run on: March 24, 2003, 17:22:16 : Search time 16.25 Seconds
(without alignments)
76.908 Million cell updates/sec

Title: US-09-508-828B-3

Perfect score: 51

Sequence: 1 CXTQYXXESXAXY 13

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 283224 seqs, 96134422 residues

Total number of hits satisfying chosen parameters: 283224

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 10%

Listing first 45 summaries

Database :

1: PIR.73:*
2: PIR1:*
3: PIR2:*
4: PIR4:**

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	42	82.4	252	2	JC6175 prion protein - ra
2	42	82.4	254	1	UJHYIH major prion PrP-Sc
3	42	82.4	257	2	A23545 major prion PrP27-
4	41	80.4	226	2	A53892 prion-related prot
5	41	80.4	232	2	S71041 major prion protel
6	41	80.4	239	2	S53633 major prion protel
7	41	80.4	241	2	S71056 major prion protel
8	41	80.4	241	2	S71048 major prion protel
9	41	80.4	245	2	S53627 major prion protel
10	41	80.4	245	2	S71045 major prion protel
11	41	80.4	252	2	I61848 major prion protel
12	41	80.4	252	2	S53634 major prion protel
13	41	80.4	252	2	S53631 major prion protel
14	41	80.4	253	1	UJHU major prion protel
15	41	80.4	253	2	I37032 major prion protel
16	41	80.4	253	2	I61847 major prion protel
17	41	80.4	253	2	S53635 major prion protel
18	41	80.4	253	2	I84423 major prion protel
19	41	80.4	253	2	S53618 major prion protel
20	41	80.4	253	2	S53619 major prion protel
21	41	80.4	253	2	S53620 major prion protel
22	41	80.4	253	2	S71055 major prion protel
23	41	80.4	253	2	S53623 major prion protel
24	41	80.4	253	2	S53624 major prion protel
25	41	80.4	253	2	S53625 major prion protel
26	41	80.4	253	2	S53617 major prion protel
27	41	80.4	253	2	S53614 major prion protel
28	41	80.4	253	2	S53616 major prion protel
29	41	80.4	254	2	A34759 prion protein - Ch

30	41	80.4	254	2	B34759 prion protein - go
31	41	80.4	254	2	A23544 major prion protel
32	41	80.4	256	2	JU0268 major prion protel
33	41	80.4	256	2	S37149 prion protein - go
34	41	80.4	256	2	A54281 major prion protel
35	41	80.4	257	2	J01900 major prion protel
36	41	80.4	260	2	S53629 major prion protel
37	41	80.4	264	2	S37137 prion protein - gr
38	41	80.4	264	2	A54330 major prion protel
39	31	60.8	938	2	H53050 probable ferredoxi
40	30	58.8	339	2	JC7509 glycoprotein VI-1
41	30	58.8	499	2	D69735 xylose kinase xy
42	30	58.8	738	2	S65169 hypothetical prote
43	29	56.9	392	2	I51422 glutamine syntheta
44	29	56.9	392	2	T19867 hypothetical prote
45	29	56.9	639	2	S23569 gag polypeptide ho

ALIGNMENTS

RESULT 1

JC6175

prion protein - rabbit

C:Species: Oryctolagus cuniculus (domestic rabbit)

C:Date: 11-Apr-1997 #sequence_revision 09-May-1997 #text_change 13-Aug-1999

C:Accession: JC6175

R:loftus, B.; Rogers, M.

Gene 184, 215-219, 1997

A:Title: Characterization of a prion protein (PrP) gene from rabbit; a species with a

A:Reference number: JC6175; MUID:97183665; PMID:9031631

A:Accession: JC6175

A:Molecule type: DNA

A:Residues: 1-252 <LOF>

A:Cross-references: GB:U28334; NID:91490412; PIDN:AA048697.1; PID:91490413

A:Comment: This protein is a cellular protein. It is involved in the neurodegenerativ

C:Genetics:

A:Gene: PrP

C:Superfamily: major prion protein

C:Keywords: disulfide bond; prion

Query Match	Score	DB	Length
Best Local Similarity	61.5%	Pred. No. 0.021;	5; Indels 0; Gaps 0;
Matches	8; Conservative	0; Mismatches	5; Indels 0; Gaps 0;
OY	1	CXTQYXXESXAXY 13	
DB	213	CITQYQESQNAV 225	

RESULT 2

UJHYIH

major prion PrP-Sc protein precursor - golden hamster

N:Contains: scrapie amyloid protein (PrP27-30)

C:Species: Mesocricetus auratus (golden hamster)

C:Date: 04-Dec-1986 #sequence_revision 12-Apr-1996 #text_change 28-Jan-2000

C:Accession: I48168; A03133; I48167; S02520; A36019; A40665

R:Basler, K.; Oesch, B.; Scott, M.G.; Westaway, D.; Maechli, M.; Groth, D.F.; McKinl

Cell 46, 417-428, 1986

A:Title: Scrapie and cellular PrP isoforms are encoded by the same chromosomal gene.

A:Reference number: I48168; MUID:86272089; PMID:2873895

A:Accession: I48168

A:Molecule type: DNA

A:Residues: 1-254 <RES>

A:Cross-references: GB:M14054; NID:9191425; PIDN:AAA37091.1; PID:9387076

R:Oesch, B.; Westaway, D.; Maechli, M.; McKinley, M.P.; Kent, S.B.H.; Aebbersold, R.;

Cell 40, 735-746, 1985

A:Title: A cellular gene encodes scrapie PrP 27-30 protein.

A:Reference number: A03133; MUID:85176927; PMID:2859120

A:Accession: A03133

A:Molecule type: mRNA

A:Residues: 15-254 <DES>

A:Cross-references: GB:K02234; NID:9191429; PIDN:AAA37092.1; PID:9191430

A:Note: this mRNA, isolated from the brain of scrapie-infected hamster, is the product of the PrP^{Sc} gene.
 R:Stahl, N.; Baldwin, M.A.; Teplow, D.B.; Hood, L.; Gibson, B.W.; Burlingame, A.L.; Prus
 Biochemistry 32, 1991-2002, 1993
 A:Title: Structural studies of the scrapie prion protein using mass spectrometry and am
 A:Reference number: A40665; MUID:93192259; PMID:8448158
 A:Contents: Annotation: chemical (not conformational) identity of PrP^{Sc} and PrP^C molecu
 A:Note: no chemical difference between cellular (PrP^C) and scrapie (PrP^{Sc}) forms of this
 R:McKinley, M.P.; Prusiner, S.B.
 Int. Rev. Neurobiol. 28, 1-57, 1986
 A:Title: Biology and structure of scrapie prions.
 A:Reference number: 148167; MUID:87108309; PMID:3100471
 A:Accession: 148167
 A:Status: preliminary; translated from GB/EMBL/DBJ
 A:Molecule type: mRNA
 A:Residues: 12-254 <RES>
 A:Cross-references: GB:M37381; NID:g191422; PIDN:AAA37090.1; PID:g191423
 R:Turk, E.; Teplow, D.B.; Hood, L.E.; Prusiner, S.B.
 Eur. J. Biochem. 176, 21-30, 1988
 A:Title: Purification and properties of the cellular and scrapie hamster prion proteins.
 A:Reference number: S02519; MUID:88329062; PMID:3138115
 A:Accession: S02520
 A:Molecule type: protein
 A:Residues: 23-24, 'X', 26-36, 'X', 38-55 <TUR>
 A:Experimental source: strain Ldk-LV6
 R:Safar, J.; Wang, W.; Padgett, M.P.; Geronzi, M.; Piccardo, P.; Zopf, D.; Gajdusek, D.C.
 Proc. Natl. Acad. Sci. U.S.A. 87, 6373-6377, 1990
 A:Title: Molecular mass, biochemical composition, and physicochemical behavior of the in
 A:Reference number: A36019; MUID:90349618; PMID:1974720
 A:Accession: A36019
 A:Molecule type: protein
 A:Residues: 'S', 24-32 <SAR>
 A:Experimental source: brain, strain 263-K
 C:Comment: Scrapie amyloid protein PrP²⁷⁻³⁰ is a strongly aggregating, amyloid fibril-fc
 C:Genetics:
 A:Introns: #status absent
 A:Note: an intron is found 5' to the coding region
 C:Superfamily: major prion protein
 F:1-22/Domain: signal sequence #status predicted <SIG>
 F:23-231/Product: major prion PrP²⁷⁻³⁰ protein #status experimental <MAT>
 F:232-254/Domain: carboxyl-terminal propeptide #status predicted <CPP>
 F:181,197/Binding site: carbohydrate (Asn) (covalent) #status experimental
 F:231/Modified site: GPI-anchor ethanolamine amidated carboxyl end (Ser) (in mature form
 Query Match 82.4%; Score 42; DB 1; Length 254;
 Best Local Similarity 61.5%; Pred. No. 0.021;
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
 OY 1 CXTQYXXESXAXY 13
 DB 214 CTTQYOKESQAYY 226

RESULT 3
 A23545
 major prion PrP²⁷⁻³⁰ protein - hamster
 C:Species: Crictetinae gen. sp. (hamster)
 C:Date: 29-Aug-1987 #sequence_revision 29-Aug-1987 #text_change 18-Jun-1993
 C:Accession: A23545
 R:Robakis, N.K.; Sawh, P.R.; Wolfe, G.C.; Rubenstein, R.; Carp, R.I.; Innis, M.A.
 Proc. Natl. Acad. Sci. U.S.A. 83, 6377-6381, 1986
 A:Title: Isolation of a cDNA clone encoding the leader peptide of prion protein and expr
 A:Reference number: A23545; MUID:86313584; PMID:3529083
 A:Accession: A23545
 A:Molecule type: protein
 A:Residues: 1-257 <ROB>
 C:Superfamily: major prion protein
 Query Match 82.4%; Score 42; DB 2; Length 257;
 Best Local Similarity 61.5%; Pred. No. 0.021;
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
 OY 1 CXTQYXXESXAXY 13

DB 217 CTTQYOKESQAYY 229

RESULT 4
 A53892
 prion-related protein - rat (fragment)
 C:Species: Rattus norvegicus (Norway rat)
 C:Date: 07-Oct-1994 #sequence_revision 07-Oct-1994 #text_change 13-Aug-1999
 C:Accession: A53892
 R:Jiao, Y.C.; Tokes, Z.; Lhm, E.; Lackey, A.; Woc, C.H.; Button, J.D.; Clawson, G.A.
 Lab. Invest. 57, 370-374, 1987
 A:Title: Cloning of rat "prion-related protein" cDNA.
 A:Reference number: A53892; MUID:88037055; PMID:2889848
 A:Accession: A53892
 A:Status: preliminary
 A:Molecule type: mRNA
 A:Residues: 1-226 <LIA>
 A:Cross-references: GB:M20313; NID:g206391; PIDN:AAA41947.1; PID:g206392
 C:Superfamily: major prion protein
 Query Match 80.4%; Score 41; DB 2; Length 226;
 Best Local Similarity 61.5%; Pred. No. 0.033;
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
 OY 1 CXTQYXXESXAXY 13
 DB 186 CTTQYOKESQAYY 198

RESULT 5
 S71041
 major prion protein - black-handed spider monkey (fragment)
 C:Species: Atelus geoffroyi (black-handed spider monkey)
 C:Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 13-Aug-1999
 C:Accession: S71041; S53630
 R:Schatz, H.M.
 submitted to the EMBL Data Library, April 1994
 A:Reference number: S71041
 A:Accession: S71041
 A:Molecule type: DNA
 A:Residues: 1-232 <SCH>
 A:Cross-references: EMBL:U08309; NID:g474376; PIDN:AAC50097.1; PID:g474377
 R:Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 J. Mol. Biol. 245, 362-374, 1995
 A:Title: Prion protein gene variation among primates.
 A:Reference number: S53614; MUID:95139066; PMID:7837269
 A:Accession: S53630
 A:Status: nucleic acid sequence not shown
 A:Molecule type: DNA
 A:Residues: 1-194, 'R', 196-231 <SCW>
 A:Cross-references: EMBL:U08309
 C:Superfamily: major prion protein
 C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane
 Query Match 80.4%; Score 41; DB 2; Length 232;
 Best Local Similarity 61.5%; Pred. No. 0.033;
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
 OY 1 CXTQYXXESXAXY 13
 DB 198 CTTQYOKESQAYY 210

RESULT 6
 S53633
 major prion protein - douroucouli (fragment)
 C:Species: Aotus trivirgatus (douroucouli, night monkey, owl monkey)
 C:Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 13-Aug-1999
 C:Accession: S53633; S71042
 R:Schatz, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 J. Mol. Biol. 245, 362-374, 1995
 A:Title: Prion protein gene variation among primates.

A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53633
A:Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-239 <SCH>
A:Cross-references: EMBL:U08293
R:Schatzl, H.M.
Submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71042
A:Molecule type: DNA
A:Residues: 1-202, 'E', 204-239 <SCW>
A:Cross-references: EMBL:U08293; NID:9474344; PIDN:ANCS0082.1; PID:9474345
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane protein

Query Match 80.4%; Score 41; DB 2; Length 239;
Best Local Similarity 61.5%; Pred. No. 0.034;
Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTQYXXESXAXY 13
DB 206 CTTQYKESQAYY 218

RESULT 7
Major prion protein - mandrill (fragment)
C:Species: Papio sphinx, Mandrillus sphinx (mandrill)
C>Date: 27-Oct-1996 #sequence_revision 14-Feb-1997 #text_change 13-Aug-1999
C:Accession: S71056; S53621
R:Schatzl, H.M.
Submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71056
A:Molecule type: DNA
A:Residues: 1-241 <SCH>
A:Cross-references: EMBL:U08303; NID:9474364; PIDN:ANCS0091.1; PID:9474365
R:Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53621
A:Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-203, 'R', 205-240 <SCW>
A:Cross-references: EMBL:U08303
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane protein

Query Match 80.4%; Score 41; DB 2; Length 241;
Best Local Similarity 61.5%; Pred. No. 0.035;
Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTQYXXESXAXY 13
DB 207 CTTQYKESQAYY 219

RESULT 8
Major prion protein - Callithacus moloch (fragment)
C:Species: Callithacus moloch
C>Date: 27-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 13-Aug-1999
C:Accession: S71048; S53632
R:Schatzl, H.M.
Submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71048
A:Molecule type: DNA
A:Residues: 1-241 <SCH>
A:Cross-references: EMBL:U08312; NID:9475585; PIDN:ANCS0100.1; PID:9475586
R:Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53632
A:Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-203, 'R', 205-240 <SCW>
A:Cross-references: EMBL:U08312
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane protein

Query Match 80.4%; Score 41; DB 2; Length 241;
Best Local Similarity 61.5%; Pred. No. 0.035;
Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTQYXXESXAXY 13
DB 207 CTTQYKESQAYY 219

RESULT 9
Major prion protein - green monkey
C:Species: Cercopithecus aethiops (green monkey, grivet)
C>Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 13-Aug-1999
C:Accession: S53627; S71043
R:Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53627
A:Status: nucleic acid sequence not shown
A:Molecule type: DNA
A:Residues: 1-245 <SCH>
A:Cross-references: EMBL:U08291
R:Schatzl, H.M.
Submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71043
A:Molecule type: DNA
A:Residues: 1-10, 'V', 12-202, 'E', 204-245 <SCW>
A:Cross-references: EMBL:U08291; NID:9474340; PIDN:ANCS0080.1; PID:9474341
C:Superfamily: major prion protein
C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane protein

Query Match 80.4%; Score 41; DB 2; Length 245;
Best Local Similarity 61.5%; Pred. No. 0.035;
Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTQYXXESXAXY 13
DB 206 CTTQYKESQAYY 218

RESULT 10
Major prion protein - Cercopithecus diana
C:Species: Cercopithecus diana
C>Date: 14-Feb-1997 #sequence_revision 14-Feb-1997 #text_change 13-Aug-1999
C:Accession: S71045; S53628
R:Schatzl, H.M.
Submitted to the EMBL Data Library, April 1994
A:Reference number: S71041
A:Accession: S71045
A:Molecule type: DNA
A:Residues: 1-245 <SCH>
A:Cross-references: EMBL:U08292; NID:9474342; PIDN:ANCS0081.1; PID:9474343
R:Schatzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
J. Mol. Biol. 245, 362-374, 1995
A:Title: Prion protein gene variation among primates.
A:Reference number: S53614; MUID:95139066; PMID:7837269
A:Accession: S53628
A:Status: nucleic acid sequence not shown

A:Molecule type: DNA
 A:Residues: 8-10,'U',12-202,'R',204-239 <SCW>
 A:Cross-references: EMBL:U08292
 C:Superfamily: major prion protein
 C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane protein

Query Match 80.4%; Score 41; DB 2; Length 245;
 Best Local Similarity 61.5%; Pred. No. 0.035;
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
 OY 1 CXTQYXXESXAY 13
 DB 206 CITOYKESQAY 218

RESULT 11
 161848
 major prion protein precursor - common squirrel monkey
 C:Species: Saimiri sciureus (common squirrel monkey)
 C>Date: 31-May-1996 #sequence_revision 31-May-1996 #text_change 13-Aug-1999
 C:Accession: 161848
 R:Cervenkova, L.; Brown, P.; Goldfarb, L.G.; Nagle, J.; Petrone, K.; Rubenstein, R.; D
 Proc. Natl. Acad. Sci. U.S.A. 91, 12159-12162, 1994
 A:Title: Infectious amyloid precursor gene sequences in primates used for experimental
 A:Reference number: 136907; MUID:95083661; PMID:7991600
 A:Accession: 161848
 A:Status: preliminary; translated from GB/EMBL/DBJ
 A:Molecule type: DNA
 A:Residues: 1-252 <RES>
 A:Cross-references: EMBL:U15165; NID:g595852; PIDN:AAA68636.1; PID:g595853
 C:Superfamily: major prion protein

Query Match 80.4%; Score 41; DB 2; Length 252;
 Best Local Similarity 61.5%; Pred. No. 0.036;
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
 OY 1 CXTQYXXESXAY 13
 DB 213 CITOYKESQAY 225

RESULT 12
 553634
 major prion protein - common marmoset
 C:Species: Callithrix jacchus (common marmoset)
 C>Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 13-Aug-1999
 C:Accession: 553634; S71047
 R:Schaetzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.
 J. Mol. Biol. 245, 362-374, 1995
 A:Title: Prion protein gene variation among primates.
 A:Reference number: 553614; MUID:95139066; PMID:7837269
 A:Accession: 553634
 A:Status: nucleic acid sequence not shown
 A:Molecule type: DNA
 A:Residues: 1-252 <SCH>
 A:Cross-references: EMBL:U08304
 R:Schaetzl, H.M.
 submitted to the EMBL Data Library, April 1994
 A:Reference number: S71041
 A:Accession: S71047
 A:Molecule type: DNA
 A:Residues: 1-209,'E',211-252 <SCW>
 A:Cross-references: EMBL:U08304; NID:9474366; PIDN:AAC50092.1; PID:9474367
 C:Superfamily: major prion protein
 C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane protein

Query Match 80.4%; Score 41; DB 2; Length 252;
 Best Local Similarity 61.5%; Pred. No. 0.036;
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
 OY 1 CXTQYXXESXAY 13
 DB 213 CITOYKESQAY 225

RESULT 13
 553631
 major prion protein - brown capuchin

C:Species: Cebus apella (brown capuchin, black-capped capuchin)
 C>Date: 28-Oct-1996 #sequence_revision 07-Feb-1997 #text_change 13-Aug-1999
 C:Accession: 553631; S71044
 R:Schaetzl, H.M.; da Costa, M.; Taylor, L.; Cohen, F.E.; Prusiner, S.B.

J. Mol. Biol. 245, 362-374, 1995
 A:Title: Prion protein gene variation among primates.
 A:Reference number: 553614; MUID:95139066; PMID:7837269
 A:Accession: 553631
 A:Status: nucleic acid sequence not shown
 A:Molecule type: DNA
 A:Residues: 1-252 <SCH>

A:Cross-references: EMBL:U08295
 R:Schaetzl, H.M.
 submitted to the EMBL Data Library, April 1994
 A:Reference number: S71041
 A:Accession: S71044
 A:Molecule type: DNA

A:Residues: 1-209,'E',211-252 <SCW>
 A:Cross-references: EMBL:U08295; NID:9474348; PIDN:AAC50084.1; PID:9474349
 C:Superfamily: major prion protein
 C:Keywords: amyloid; brain; glycoprotein; lipoprotein; prion; scrapie; transmembrane

Query Match 80.4%; Score 41; DB 2; Length 252;
 Best Local Similarity 61.5%; Pred. No. 0.036;
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
 OY 1 CXTQYXXESXAY 13
 DB 213 CITOYKESQAY 225

RESULT 14
 UJHU
 major prion protein precursor - human
 A:Alternate names: 11k amyloid protein; 27-30k statoglycoprotein; PrP 27-30; PrP 33-3
 C:Species: Homo sapiens (man)
 C>Date: 25-Oct-1987 #sequence_revision 12-Apr-1996 #text_change 16-Jun-2000
 C:Accession: A24173; A40372; S14078; I54322; I68597; I59184; I79633;
 R:Kretzschmar, H.A.; Stowring, L.E.; Westaway, D.; Stubblefield, W.H.; Prusiner, S.B.;
 DNA 5, 315-324, 1986
 A:Title: Molecular cloning of a human prion protein cDNA.
 A:Reference number: A24173; MUID:86300093; PMID:3755672
 A:Accession: A24173
 A:Molecule type: mRNA
 A:Residues: 1-253 <RRE>
 A:Cross-references: GB:M13899; NID:9190467; PIDN:AAA60182.1; PID:9190468
 R:Puckett, C.; Concanon, P.; Casey, C.; Hood, L.
 Am. J. Hum. Genet. 49, 320-329, 1991
 A:Title: Genomic structure of the human prion protein gene.
 A:Reference number: A40372; MUID:91328137; PMID:1678248
 A:Accession: A40372
 A:Status: not compared with conceptual translation
 A:Molecule type: DNA
 A:Residues: 1-80,89-253 <PIC>
 A:Cross-references: GB:X83416; NID:9747846; PIDN:CAA58442.1; PID:9747847
 A:Note: the deletion may be a polymorphism; the alternative deletion of 82-89 could n
 R:Liiao, Y.C.; Lebo, R.V.; Clawson, G.A.; Smuckler, E.A.
 Science 233, 364-367, 1986
 A:Reference number: A05017; MUID:86261778; PMID:3014653
 A:Accession: A05017
 A:Molecule type: mRNA
 A:Residues: 8-117,119-253 <LIN>
 A:Cross-references: GB:D00015; NID:9220015; PIDN:BA00011.1; PID:9220016; GB:M13667;
 R:Tagliavini, F.; Prelli, F.; Ghiso, J.; Bugiani, O.; Serban, D.; Prusiner, S.B.; Far
 EMBO J. 10, 513-519, 1991
 A:Title: Amyloid protein of Gerstmann-Strauszler-scheinker disease (Indiana kindred)
 A:Reference number: S14078; MUID:91160504; PMID:1672107
 A:Accession: S14078

GenCore version 5.1.4.p5.4578
Copyright (c) 1993 - 2003 Compugen Ltd.

OW protein - protein search, using sw model

Run on: March 24, 2003, 17:17:23 ; Search time 7.85417 Seconds
(Without alignments)
68.650 Million cell updates/sec

Title: US-09-508-828b-3
Perfect score: 51
Sequence: 1 CXTQYXXESXAXY 13

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 112892 seqs, 41476328 residues
Total number of hits satisfying chosen parameters: 112892

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : SWISSPROT.40.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Length	ID	Description
1	42	82.4	PRIO_RABIT	095211 oryctolagus
2	42	82.4	PRIO_MESAU	P04273 mesocricetu
3	41	80.4	PRIO_ATEGE	P40246 atelea geof
4	41	80.4	PRIO_CERAT	Q95145 cercocobus
5	41	80.4	PRIO_THEGE	Q95170 theophilhec
6	41	80.4	PRIO_AOTTR	P40245 aotus trivi
7	41	80.4	PRIO_CALMO	P40248 callilcebus
8	41	80.4	PRIO_MANSP	P40255 mandrillus
9	41	80.4	PRIO_CERAE	P40250 cercopithec
10	41	80.4	PRIO_CERMO	Q95172 cercopithec
11	41	80.4	PRIO_CERPA	Q95174 cercopithec
12	41	80.4	PRIO_CERCO	Q95176 cercocobus
13	41	80.4	PRIO_ATEPA	P51446 atelea pant
14	41	80.4	PRIO_CALJA	P40247 callitrich
15	41	80.4	PRIO_CEBAP	P40249 cebus apell
16	41	80.4	PRIO_COLCU	P40251 colobus gue
17	41	80.4	PRIO_GORGO	P40252 gorilla gor
18	41	80.4	PRIO_HUMAN	P40156 homo sapien
19	41	80.4	PRIO_MACFA	P40254 macaca fasc
20	41	80.4	PRIO_PANTR	P40253 pan troglod
21	41	80.4	PRIO_PONRY	P40256 pongo pygma
22	41	80.4	PRIO_PREFR	P40257 presbytis f
23	41	80.4	PRIO_CRIGR	Q60506 cricetus
24	41	80.4	PRIO_CRIMI	Q60468 cricetus
25	41	80.4	PRIO_MOUSE	P04925 mus musculu
26	41	80.4	PRIO_RAT	P13852 rattus norv
27	41	80.4	PRIO_SIGHI	Q92053 sigmodon bl
28	41	80.4	PRIO_CANPA	O46501 canis fami
29	41	80.4	PRIO_CAPHT	P52143 capra hircu
30	41	80.4	PRIO_CEREL	P79142 cervus elap
31	41	80.4	PRIO_FELCA	O18754 felis silve
32	41	80.4	PRIO_ODOHE	P47852 odocolleus
33	41	80.4	PRIO_SHEEP	P23507 ovis aries

34	41	80.4	PRP2_BOVIN	Q01880 bos taurus
35	41	80.4	PRP2_TRAST	P40243 tragelaphus
36	41	80.4	PRIO_MUSPF	P52114 mustela put
37	41	80.4	PRIO_MUSVI	P40244 mustela vis
38	41	80.4	PRIO_SATSC	P40258 salmatri sci
39	41	80.4	PRIO_BOVIN	P10279 bos taurus
40	41	80.4	PRP1_TRAST	P40242 tragelaphus
41	36	70.6	PRIO_CAMDR	P79141 camelus dro
42	30	58.8	PRIO_TRIUV	P51780 trichosurus
43	30	58.8	XYLB_BACSU	P39211 bacillus su
44	30	58.8	YPS8_YEAST	O99299 saccharomyc
45	29	56.9	PRIO_PIG	P49927 sus scrofa

ALIGNMENTS

RESULT 1	ID	PRIO_RABIT	STANDARD	PRT	252 AA
AC	095211				
DT	01-NOV-1997	(Rel. 35, Created)			
DT	01-NOV-1997	(Rel. 35, Last sequence update)			
DT	01-NOV-1997	(Rel. 35, Last annotation update)			
DE	Major prion protein precursor (Prp) (Prp27-30) (Prp33-35C).				
GN	PRNP OR PRP.				
OS	Oryctolagus cuniculus (Rabbit).				
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;				
OC	Mammalia; Eutheria; Lagomorpha; Leporidae; Oryctolagus.				
OX	NCBI_TaxID=9986;				
RN	[1]				
RP	SEQUENCE FROM N.A.				
RC	STRAIN-New Zealand white;				
RX	MEDLINE=9718365; PubMed=9031631;				
RA	Loftus B., Rogers M.;				
RT	"Characterization of a prion protein (Prp) gene from rabbit; a				
RT	species with apparent resistance to infection by prions.";				
RL	Gene 184:215-219(1997).				
CC	-1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE				
CC	HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.				
CC	-1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED				
CC	"RODS".				
CC	-1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.				
CC	-1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND				
CC	ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,				
CC	CEUTZFELDT-JAKOB DISEASE (CJD), GESTAMANN-STRAUSSLER SYNDROME				
CC	(GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),				
CC	TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.				
CC	-1- SIMILARITY: BELONGS TO THE PRION FAMILY.				
CC	-----				
CC	THIS SWISS-PROT entry is copyright. It is produced through a collaboration				
CC	between the Swiss Institute of Bioinformatics and the EMBL outstation -				
CC	the European Bioinformatics Institute. There are no restrictions on its				
CC	use by non-profit institutions as long as its content is in no way				
CC	modified and this statement is not removed. Usage by and for commercial				
CC	entities requires a license agreement (see http://www.isb-sib.ch/announce/				
CC	or send an email to license@sib-sib.ch).				
CC	-----				
DR	EMBL: U28334; AAC48697.1; .				
DR	HSSP: P10279; IDMY.				
DR	InterPro: IPR000817; Prion.				
DR	Pfam: PF00377; Prion.1.				
DR	PRINTS: PR00341; PRION.				
DR	SMART: SM00157; PRP.1.				
DR	PROSITE: PS00291; PRION.1; 1.				
DR	PROSITE: PS00706; PRION.2; 1.				
KW	Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.				
FT	SIGNAL 1 28				
FT	CHAIN 29 252				
FT	CARBOHYD 180 180				
FT	CARBOHYD 196 196				
FT	DISULFID 178 213				
FT	DOMAIN 51 92				

5 X 8 AA TANDEM REPEATS OF P-H-G-G-G-W-G-

FT FT REPEAT 51 59 0.
 RN REPEAT 60 67 1.
 FT REPEAT 68 75 2.
 RN REPEAT 76 83 3.
 FT REPEAT 84 92 4.
 RN REPEAT 84 92 5.
 SO SEQUENCE 252 AA: 27432 KM: 2E177AAE38B23A54 CRC64;
 Query Match 82.4%; Score 42; DB 1; Length 252;
 Best Local Similarity 61.5%; Pred. No. 0.0067;
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
 DB 213 CITOYXOESQAY 225
 QY 1 CTOYXXESKAY 13
 ID PRIOMESAU STANDARD; PRT; 254 AA.
 AC P04273;
 DT 20-MAR-1987 (Rel. 04, Created)
 DT 01-JAN-1988 (Rel. 06, Last sequence update)
 DT 15-DEC-1998 (Rel. 37, Last annotation update)
 DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).
 OS Mesocricetus auratus (Golden hamster).
 OC Eukaryota; Metazoa; Chordata; Craniata; Euteleostomi;
 OC Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Cricetinae;
 OC Mesocricetus.
 NCBI_TaxID=10036;
 RN [1]
 RN SEQUENCE FROM N.A.
 RX MEDLINE=68272089; PubMed=2873895;
 RA Basler K., Osach B., Scott M., Westaway D., Waelchli M., Groth D.F.,
 RA McKinley M.P., Prusiner S.B., Weissmann C.;
 RT "Scrapie and cellular PrP isoforms are encoded by the same
 RT chromosomal gene.";
 RL Cell 46:417-428(1986).
 RN [2]
 RN SEQUENCE OF 15-254 FROM N.A.
 RX MEDLINE=85176927; PubMed=2859120;
 RA Osach B., Westaway D., Waelchli M., McKinley M.P., Kent S.B.H.,
 RA Aebersold R., Barry R.A., Tempst P., Teplov D.B., Hood L.E.,
 RA Prusiner S.B., Weissmann C.;
 RT "A cellular gene encodes scrapie PrP 27-30 protein.";
 RL Cell 40:735-746(1985).
 RN [3]
 RN CARBOHYDRATE-LINKAGE SITES, AND DISULFIDE BONDS.
 RX MEDLINE=88329062; PubMed=3138115;
 RA Turk E., Teplov D.B., Hood L.E., Prusiner S.B.;
 RT "Purification and properties of the cellular and scrapie hamster
 RT prion proteins.";
 RL Eur. J. Biochem. 176:21-30(1988).
 RN [4]
 RN GPI-ANCHOR.
 RX MEDLINE=88027007; PubMed=2444340;
 RA Stahl N., Borchelt D.R., Hasiao K., Prusiner S.B.;
 RT "Scrapie prion protein contains a phosphatidylinositol glycolipid.";
 RL Cell 51:229-240(1987).
 RN [5]
 RN GPI-ANCHOR.
 RX MEDLINE=91104789; PubMed=1980209;
 RA Stahl N., Baldwin M.A., Burlingame A.L., Prusiner S.B.;
 RT "Identification of glycolipid-linked and truncated
 RT forms of the scrapie prion protein.";
 RL Biochemistry 29:8879-8884(1990).
 RN [6]
 RN MUTAGENESIS OF CARBOHYDRATE-LINKAGE SITES.
 RX MEDLINE=92369621; PubMed=1983782;
 RA Rogers M., Taraboulos A., Scott M., Groth D., Prusiner S.B.;
 RT "Intracellular accumulation of the cellular prion protein after
 RT mutagenesis of its Asn-linked glycosylation sites.";

RL Glycobiology 1:101-109(1990).
 RN [7]
 RN STRUCTURE BY NMR OF 90-231.
 RX MEDLINE=97439821; PubMed=9294167;
 RA James T.L., Liu H., Ulyanov N.B., Farr-Jones S., Zhang H.,
 RA Donne D.G., Kaneko K., Groth D., Mehlhorn I., Prusiner S.B.,
 RA Cohen F.E.;
 RT "Solution structure of a 142-residue recombinant prion protein
 RT corresponding to the infectious fragment of the scrapie isoform.";
 RL Proc. Natl. Acad. Sci. U.S.A. 94:11086-11091(1997).
 RN [8]
 RN STRUCTURE BY NMR OF 29-231.
 RX MEDLINE=98054254; PubMed=9391046;
 RA Prusiner S.B., Wright P.E., Dyson H.J.,
 RA McKinley M.P., Groth D., Mehlhorn I., James T.L., Cohen F.E.,
 RT PrP(29-231): the N terminus is highly flexible.";
 RL Proc. Natl. Acad. Sci. U.S.A. 94:13452-13457(1997).
 CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE
 CC HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.
 CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED
 CC "RODS".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND ANIMALS
 CC INFECTED WITH DEGENERATIVE NEUROLOGICAL DISEASES SUCH AS KURU,
 CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME
 CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
 CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.
 CC -----
 CC This SWISS-PROT entry is copyright. It is produced through a collaboration
 CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
 CC the European Bioinformatics Institute. There are no restrictions on its
 CC use by non-profit institutions as long as its content is in no way
 CC modified and this statement is not removed. Usage by and for commercial
 CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
 CC or send an email to license@isb-sib.ch).
 CC -----
 DR EMBL: K02234; AAA37092.1; -;
 DR EMBL: M14054; AAA37091.1; -;
 DR PIR: A01133; UJHYH.
 DR PDB: 1B10; 02-DEC-98.
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; Prion; 1.
 DR PRINTS: PR00341; PRION.
 DR SMART: SM00157; PrP; 1.
 DR PROSITE: PS00291; PRION_1; 1.
 DR PROSITE: PS00706; PRION_2; 1.
 KW Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal; 3D-structure.
 FT SIGNAL 1 22
 FT CHAIN 23 231
 FT PROPEP 232 254
 FT LIPID 231 231
 FT DOMAIN 90 231
 FT CARBOHYD 181 181
 FT CARBOHYD 197 197
 FT DISULFID 179 214
 FT DOMAIN 51 91
 FT REPEAT 51 59
 FT REPEAT 60 67
 FT REPEAT 68 75
 FT REPEAT 76 83
 FT REPEAT 84 91
 FT MUTAGEN 183 183
 FT MUTAGEN 199 199
 SO SEQUENCE 254 AA: 27919 KM: 442C0E3BD420672 CRC64;
 Query Match 82.4%; Score 42; DB 1; Length 254;
 Best Local Similarity 61.5%; Pred. No. 0.0067;
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
 QY 1 CTOYXXESKAY 13

Db 214 CTQYQKESQAYY 226

PR	RESULT_3
ID	PRIOT_ATEGE
AC	P40246;
DT	01-FEB-1995 (Rel. 31, Created)
DT	01-FEB-1995 (Rel. 31, Last sequence update)
DT	01-OCT-1996 (Rel. 34, Last annotation update)
DE	Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
OS	PrNP.
OC	Ateles geoffroyi (Black-handed spider monkey).
OC	Aetherya; Metacoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC	Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Ateles.
ON	NCBI_TaxID=9509;
RP	[1]
RX	SEQUENCE FROM N.A.
RA	Schaefer H.M., Decosta M., Taylor L., Cohen F.E., Prusiner S.B.:
RT	"Prion protein gene variation among primates."
RL	J. Mol. Biol. 245:362-374(1995).
CC	-1 - FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE
CC	HOT GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.
CC	-1 - SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED
CC	"KODS".
CC	-1 - SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC	-1 - DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
CC	ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASE KURU,
CC	CHEUTFEUDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME
CC	(GSS), SCRAPE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
CC	TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
CC	-1 - SIMILARITY: BELONGS TO THE PRION FAMILY.
CC	-----
CC	THIS SWISS-PROT entry is copyright. It is produced through a collaboration
CC	between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC	the European Bioinformatics Institute. There are no restrictions on its
CC	use by non-profit institutions as long as its content is in no way
CC	modified and this statement is not removed. Usage by and for commercial
CC	entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC	or send an email to license@isb-sib.ch).
CC	-----
DR	EMBL; U08309; AAC50097.1; .-
DR	HSSP; P04156; IEIG.
DR	InterPro: IPR000817; Prion.
DR	Pfam; PF00377; Prion; 1.
DR	SMART; SM00157; PrP; 1.
DR	PROSITE; PS00291; PRION_1; 1.
DR	PROSITE; PS00706; PRION_2; 1.
KW	Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.
FT	NON_TER 1 1
FT	SIGNAL <1 15 BY SIMILARITY.
FT	CHAIN 16 214 MAJOR PRION PROTEIN.
FT	PROPEP 215 >232 REMOVED IN MATURE FORM (BY SIMILARITY).
FT	LIPID 214 214 GPI-ANCHOR (BY SIMILARITY).
FT	DISULFID 163 198 BY SIMILARITY.
FT	CARBOHYD 165 165 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT	CARBOHYD 181 181 N-LINKED (GLCNAC. . .) (POTENTIAL).
FT	DOMAIN 44 84 4 X 8 AA TANDEM REPEATS OF P-H-G-G-W-G-
FT	FT Q.
FT	REPEAT 44 51 1.
FT	REPEAT 52 59 2.
FT	REPEAT 60 67 3.
FT	REPEAT 68 75 4.
FT	NON_TER 232 232
SQ	SEQUENCE 232 AA; 25396 MW; 0E2D75F04C05CC4A CRC64;
QY	Query Match Score 41; DB 1; Length 232;
	Best Local Similarity 80.4%; Pred. No. 0.011;
	Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

Db 198 CITQYERESQAYY 210

```

RESULT 4
PRIO_CREAT ID PRIO_CERAT STANDARD; PRT; 238 AA.
AC 095145; 095200;
DT 01-NOV-1997 (Rel. 35, Created)
DT 01-NOV-1997 (Rel. 35, Last sequence update)
DT 15-JUN-2002 (Rel. 41, Last annotation update)
DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN PrP.
OS Cercopithecus aethiops, and
OS Macaca sylvanus (Barbary ape).
OC Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea;
OC Cercopithecidae; Cercopithecus.
OX NCBI_TaxID=36222, 9546;
RN [1]
RP SEQUENCE FROM N.A.
RA der Kuyt A.C., Dekker J.T., Goudsmit J.;
RL Submitted (NOV-1996) to the EMBL/Genbank/DDJ databases.
CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE
CC HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.
CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED
CC "RODS".
CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME
CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.
CC -----
CC CC THIS SWISS-PROT entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL Outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use by non-profit institutions as long as its content is in no way
CC modified and this statement is not removed. Usage by and for commercial
CC entities requires a license agreement (see http://www.isb-sib.ch/announce/
CC or send an email to license@isb-sib.ch).
CC -----
CC DR EMBL: U75384; AAB50623.1; -.
CC DR EMBL: U75382; AAB50629.1; -.
CC DR HSSP: P04925; IAG2.
CC DR InterPro: IPR000817; Prion.
CC DR Pfam: PF00377; Prion.1.
CC DR SMART: SM00157; Prion.1.
CC DR PROSITE: PS00291; PRION_1; 1.
CC DR PROSITE: PS00706; PRION_2; 1.
CC KW Prion; Prion; Glycoprotein; GPI-anchor; Repeat; Signal.
CC FT 1
CC FT NON_TER 1
CC FT SIGNAL 15
CC FT CHAIN 16 215
CC FT PROPEP 216 238
CC FT LIPID 215 215
CC FT DISULFID 164 199
CC FT CARBOHYD 166 166
CC FT CARBOHYD 182 182
CC FT DOMAIN 44 76
CC FT FT 44 52
CC FT REPEAT 53 60
CC FT REPEAT 61 68
CC FT REPEAT 69 76
CC FT REPEAT 4.
CC SQ SEQUENCE 238 AA; 26123 MW; 5F59A3EBC3E331B CRC64;
Query Match 80.4%; Score 41; DB 1; Length 238;
Best Local Similarity 61.5%; Pred. No. 0.011;
Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0.
1 CATOYXESXAY 13

```


RESULT 7

PRIO_CALMO STANDARD: PRT: 241 AA.

AC P40248; 01-FEB-1995 (Rel. 31, Created)

DT 01-FEB-1995 (Rel. 31, Last sequence update)

DT 01-FEB-1995 (Rel. 31, Last annotation update)

DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).

GN PrP.

OS Calliebus moloch (Dusky titl).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Calliebinae; Calliebus.

OC NCBI_TaxID=9523;

OX NCBI_TaxID=9523;

RN [1]

RP SEQUENCE FROM N.A.

RX MEDLINE=95139066; PubMed=7837269;

RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;

RT "Prion protein gene variation among primates."

RL J. Mol. Biol. 245:362-374(1995).

CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.

CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED "RODS".

CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.

CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU, CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME (GSS), SCRAPE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE), TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.

CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.

CC This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - CC the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See <http://www.isb-sib.ch/announce/> or send an email to license@sib-sib.ch).

CC -----

DR EMBL; U08312; AAC50100.1; -

DR HSSP; P04925; IAG2.

DR InterPro: IPR000817; Prion.

DR Pfam; PF00377; prion; 1.

DR SMART; SM00157; PrP; 1.

DR PROSITE; PS00291; PRION_1; 1.

DR PROSITE; PS00706; PRION_2; 1.

KW Prion; Brain; Glycoprotein; GPI-anchor; Repeat; signal.

FT NON_TER 1 1

FT SIGNAL <1 15

FT CHAIN 16 >241

FT DISULFID 172 207

FT CARBOHYD 174 174

FT CARBOHYD 190 190

FT DOMAIN 44 84

FT REPEAT 44 52

FT REPEAT 53 60

FT REPEAT 61 68

FT REPEAT 69 76

FT REPEAT 77 84

FT NON_TER 241 241

SO SEQUENCE 241 AA; 26373 MW; C6D2013EE7CAEC93 CRC64;

Query Match 80.4%; Score 41; DB 1; Length 241;

Best Local Similarity 61.5%; Pred. No. 0.011;

Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 1 CXTQYXXESXAY 13

DB 207 CITOYKEKSOAY 219

RESULT 8

PRIO_MANSF STANDARD: PRT: 241 AA.

AC P40255; 01-FEB-1995 (Rel. 31, Created)

DT 01-FEB-1995 (Rel. 31, Last sequence update)

DT 01-FEB-1995 (Rel. 31, Last annotation update)

DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).

GN PrP.

OS Mandillus sphinx (Mandrill) (Papio sphinx).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Cercopithecoidea; Cercopithecinae; Mandrillus.

OC NCBI_TaxID=9561;

OX NCBI_TaxID=9561;

RN [1]

RP SEQUENCE FROM N.A.

RX MEDLINE=95139066; PubMed=7837269;

RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;

RT "Prion protein gene variation among primates."

RL J. Mol. Biol. 245:362-374(1995).

CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.

CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED "RODS".

CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.

CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU, CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME (GSS), SCRAPE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE), TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.

CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.

CC This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - CC the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See <http://www.isb-sib.ch/announce/> or send an email to license@sib-sib.ch).

CC -----

DR EMBL; U08303; AAC50091.1; -

DR HSSP; P04925; IAG2.

DR InterPro: IPR000817; Prion.

DR Pfam; PF00377; prion; 1.

DR SMART; SM00157; PrP; 1.

DR PROSITE; PS00291; PRION_1; 1.

DR PROSITE; PS00706; PRION_2; 1.

KW Prion; Brain; Glycoprotein; GPI-anchor; Repeat; signal.

FT NON_TER 1 1

FT SIGNAL <1 15

FT CHAIN 16 223

FT PROPEP 224 >241

FT LIPID 223 223

FT DISULFID 172 207

FT CARBOHYD 174 174

FT CARBOHYD 190 190

FT DOMAIN 44 84

FT REPEAT 44 52

FT REPEAT 53 60

FT REPEAT 61 68

FT REPEAT 69 76

FT REPEAT 77 84

FT NON_TER 241 241

SO SEQUENCE 241 AA; 26398 MW; E539D84E2B259DE CRC64;

Query Match 80.4%; Score 41; DB 1; Length 241;

Best Local Similarity 61.5%; Pred. No. 0.011;

Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 1 CXTQYXXESXAY 13

DB 207 CITOYKEKSOAY 219

	PRIOR_CERAE	RESULT 9	
ID	PRIOR_CERAE	STANDARD:	PRT: 245 AA.
AC	P40250;		
DT	01-FEB-1995 (Rel. 31, Created)		
DR	01-FEB-1995 (Rel. 31, Last sequence update)		
DE	16-OCT-2001 (Rel. 40, Last annotation update)		
CN	Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).		
OS	Cercoptithecus aethiops (Green monkey) (Grivet), and		
OC	Cercopithecus diana (Diana monkey).		
CC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;		
OX	Mammalia; Eutheria; Primates; Catarrhini; Cercoptithecidae;		
RN	NCBL_TaxID=9534, 36224;		
RP	[1]		
RA	SEQUENCE FROM N.A.		
RF	MEDLINE=95139066; Pubmed=7837269;		
RL	Schultz H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.:		
CC	"Prion protein gene variation among primates.";		
CC	J. Mol. Biol. 245:362-374(1995).		
CC	- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE		
CC	HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.		
CC	- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED		
CC	"RODS".		
CC	- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.		
CC	- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND		
CC	ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,		
CC	CREUTZFELDER-JAKOB DISEASE (CJD), GERSTMANN-STRAUSSLER SYNDROME		
CC	(GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),		
CC	TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.		
CC	- SIMILARITY: BELONGS TO THE PRION FAMILY.		
CC	-----		
CC	This SWISS-PROT entry is copyright. It is produced through a collaboration		
CC	between the Swiss Institute of Bioinformatics and the EMBL Outstation -		
CC	the European Bioinformatics Institute. There are no restrictions on its		
CC	use by non-profit institutions as long as its content is in no way		
CC	modified and this statement is not removed. Usage by and for commercial		
CC	entities requires a license agreement (see http://www.isb-sib.ch/announcement/		
CC	or send an email to license@isb-sib.ch).		
CC	-----		
DR	EMBL: U08291; AAC50080.1; -.		
DR	EMBL: U08292; AAC50081.1; -.		
DR	HSSP: P04925; IAG2		
DR	InterPro: IPR000817; Prion.		
DR	pIam: PF00377; prion_1.		
DR	PRINTS: PRO0341; PRION.		
DR	SMART: SM00157; PRP; 1.		
DR	PROSITE: PS00291; PRION_1; 1.		
KW	PROSITE: PS00706; PRION_2; 1.		
DR	prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.		
FT	SIGNAL	1	22
FT	CHAIN	23	222
FT	PROPEP	223	245
FT	LIPID	222	222
FT	DISULFID	171	206
FT	CARBOHYD	173	173
FT	CARBOHYD	189	189
FT	DOMAIN	51	83
FT	REPEAT	51	59
FT	REPEAT	60	67
FT	REPEAT	68	75
FT	REPEAT	76	83
SO	SEQUENCE	245 AA; 26885 MW; 0582B58E2726C99A CRC64;	
Query Match		80.4%; Score 41; DB 1; Length 245;	
Best Local Similarity		61.5%; Pred. No. 0.011;	
Matches	8; Conservative	0; Mismatches	5; Indels
Gaps			0; Gaps
1 CXTOTXXESKXY	13		

```

Db      206 CITOYEXESQAY 218

RESULT 10
ID      PRIO_CERMO      STANDARD:      PRF:      246 AA.
AC      0951772; 095173;
DT      01-NOV-1997 (Rel. 35, Created)
DT      01-NOV-1997 (Rel. 35, Last sequence update)
DT      15-JUL-1998 (Rel. 36, Last annotation update)
DE      Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
GN      PrP.
OS      Cercopithecus mona, and
OS      Cercopithecus neglectus.
OC      Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC      Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae;
OC      Cercopithecinae; Cercopithecus.
OX      NCBI_TaxID=36226, 36227;
RN      [1]
RP      SEQUENCE FROM N.A.
RA      der Kuyil A.C., Dekker J.T., Goudsmits J.;
RL      Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
CC      -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE
CC      HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.
CC      -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED
CC      "HODS".
CC      -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
CC      -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
CC      ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
CC      CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME
CC      (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
CC      TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
CC      -1- SIMILARITY: BELONGS TO THE PRION FAMILY.
CC      -----
CC      This SWISS-PROT entry is copyright. It is produced through a collaboration
CC      between the Swiss Institute of Bioinformatics and the EMBL Outstation -
CC      CC the European Bioinformatics Institute. There are no restrictions on its
CC      CC use by non-profit institutions as long as its content is in no way
CC      CC modified and this statement is not removed. Usage by and for commercial
CC      CC entities requires a license agreement (see http://www.isb-sib.ch/announce/
CC      CC or send an email to license@isb-sib.ch).
CC      -----
DR      EMBL; U75386; AAB50625.1; -.
DR      EMBL; U75387; AAB50626.1; -.
DR      HSSP; P04925; IAG2.
DR      InterPro: IPR000817; Prion.
DR      Pfam; PF00377; prion; 1.
DR      SMART; SM00157; PrP; 1.
DR      PROSITE; PS00291; PRION_1; 1.
DR      PROSITE; PS00706; PRION_2; 1.
KW      Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.
FT      FT      NON TER      1      1
FT      FT      SIGNAL      <1      15
FT      FT      CHAIN      16      223
FT      FT      PROPEP      224      246
FT      FT      LIPID      223      223
FT      FT      DISULFID      172      207
FT      FT      CARBOHYD      174      174
FT      FT      CARBOHYD      190      190
FT      FT      DOMAIN      44      84
FT      FT      REPEAT      44      52
FT      FT      REPEAT      53      60
FT      FT      REPEAT      61      68
FT      FT      REPEAT      69      76
FT      FT      REPEAT      77      84
FT      FT      REPEAT      77      84
SQ      SEQUENCE      246 AA; 26900 MW; 835D147CA2B4FD3 CRC64;
Query Match      80.4%; Score 41; DB 1; Length 246;
Best Local Similarity      61.5%; P-vec No. 0.011;
Matches      8; Conservative      0; Mismatches      5; Indels      0; Gaps      0;

```


OY 1 CXTQYXXESXAY 13
 DB 207 CITOYKESQAYY 219

RESULT 11

PRIOT_CERPA STANDARD; PRT: 246 AA.

AC 095174;
 DT 01-NOV-1997 (Rel. 35, Created)
 DT 01-NOV-1997 (Rel. 35, Last sequence update)
 DT 01-NOV-1997 (Rel. 35, Last annotation update)
 DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
 GN PrP.
 OS Cercopithecus patas.
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae;
 OC Cercopithecinae; Cercopithecus.
 NCBI_TaxID=24677;
 RN
 RP SEQUENCE FROM N.A.
 RA der Kuyt A.C., Dekker J.T., Goudsmit J.;
 RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE
 CC HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.
 CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED
 CC "RODS".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
 CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
 CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME
 CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
 CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.

CC -----
 CC This SWISS-PROT entry is copyright. It is produced through a collaboration
 CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
 CC the European Bioinformatics Institute. There are no restrictions on its
 CC use by non-profit institutions as long as its content is in no way
 CC modified and this statement is not removed. Usage by and for commercial
 CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
 CC or send an email to license@sib-sib.ch).
 CC -----

CC EMBL: U75388; AAB50627.1; -;
 CC DR HSSP; P04925; IAG2.
 CC DR InterPro; IPR000817; Prion.
 CC DR Pfam; PF00377; Prion; 1.
 CC DR SMART; SM00157; PrP; 1.
 CC DR PROSITE; PS00291; PRION_1; 1.
 CC DR PROSITE; PS00706; PRION_2; 1.
 CC KW Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.
 CC FT NON_TER 1 1
 CC FT SIGNAL <1 15
 CC FT CHAIN 16 223 BY SIMILARITY.
 CC FT PROPEP 224 246 MAJOR PRION PROTEIN.
 CC FT LIPID 223 223 REMOVED IN MATURE FORM (BY SIMILARITY).
 CC FT DISULFID 172 207 GPI-ANCHOR (BY SIMILARITY).
 CC FT CARBOHYD 174 174 BY SIMILARITY.
 CC FT CARBOHYD 190 190 N-LINKED (GLCNAC. . .) (POTENTIAL).
 CC FT DOMAIN 44 84 5 X 8 AA TANDEM REPEATS OF P-H-G-G-G-W-G-
 CC FT REPEAT 44 52 0.
 CC FT REPEAT 53 60 1.
 CC FT REPEAT 61 68 2.
 CC FT REPEAT 69 76 3.
 CC FT REPEAT 77 84 4.
 CC FT REPEAT 84 84 5.
 CC SQ SEQUENCE 246 AA; D35D105BEC53108 CR664;

Query Match 80.4%; Score 41; DB 1; Length 246;
 Best Local Similarity 61.5%; Pred. NO. 0.011;
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
 OY 1 CXTQYXXESXAY 13

DB 207 CITOYKESQAYY 219

RESULT 12

PRIOT_CERTO STANDARD; PRT: 246 AA.

AC 095176;
 DT 01-NOV-1997 (Rel. 35, Created)
 DT 01-NOV-1997 (Rel. 35, Last sequence update)
 DT 01-NOV-1997 (Rel. 35, Last annotation update)
 DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C) (Fragment).
 GN PrP.
 OS Cercopithecus torquatus alysi (Red-crowned mangabey) (Sooty mangabey).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae;
 OC Cercopithecinae; Cercopithecus.
 NCBI_TaxID=9531;
 RN
 RP SEQUENCE FROM N.A.
 RA der Kuyt A.C., Dekker J.T., Goudsmit J.;
 RL Submitted (NOV-1996) to the EMBL/GenBank/DBJ databases.
 CC -1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE
 CC HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.
 CC -1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED
 CC "RODS".
 CC -1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.
 CC -1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND
 CC ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,
 CC CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME
 CC (GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),
 CC TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.
 CC -1- SIMILARITY: BELONGS TO THE PRION FAMILY.

CC -----
 CC This SWISS-PROT entry is copyright. It is produced through a collaboration
 CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
 CC the European Bioinformatics Institute. There are no restrictions on its
 CC use by non-profit institutions as long as its content is in no way
 CC modified and this statement is not removed. Usage by and for commercial
 CC entities requires a license agreement (See <http://www.isb-sib.ch/announce/>
 CC or send an email to license@sib-sib.ch).
 CC -----

CC EMBL: U75385; AAB50628.1; -;
 CC DR HSSP; P04925; IAG2.
 CC DR InterPro; IPR000817; Prion.
 CC DR Pfam; PF00377; Prion; 1.
 CC DR SMART; SM00157; PrP; 1.
 CC DR PROSITE; PS00291; PRION_1; 1.
 CC DR PROSITE; PS00706; PRION_2; 1.
 CC KW Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.
 CC FT NON_TER 1 1
 CC FT SIGNAL <1 15
 CC FT CHAIN 16 223 BY SIMILARITY.
 CC FT PROPEP 224 246 MAJOR PRION PROTEIN.
 CC FT LIPID 223 223 REMOVED IN MATURE FORM (BY SIMILARITY).
 CC FT DISULFID 172 207 GPI-ANCHOR (BY SIMILARITY).
 CC FT CARBOHYD 174 174 BY SIMILARITY.
 CC FT CARBOHYD 190 190 N-LINKED (GLCNAC. . .) (POTENTIAL).
 CC FT DOMAIN 44 84 5 X 8 AA TANDEM REPEATS OF P-H-G-G-G-W-G-
 CC FT REPEAT 44 52 0.
 CC FT REPEAT 53 60 1.
 CC FT REPEAT 61 68 2.
 CC FT REPEAT 69 76 3.
 CC FT REPEAT 77 84 4.
 CC FT REPEAT 84 84 5.
 CC SQ SEQUENCE 246 AA; F58679CBBEC5ADC7 CR664;

Query Match 80.4%; Score 41; DB 1; Length 246;
 Best Local Similarity 61.5%; Pred. NO. 0.011;
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
 OY 1 CXTQYXXESXAY 13

Db 207 CITOYERESQAVY 219

RESULT 13

PRIO_ATEPA STANDARD; PRT; 252 AA.

AC P51446; 01-OCT-1996 (Rel. 34, Created)

DT 01-OCT-1996 (Rel. 34, Last sequence update)

DT 01-OCT-1996 (Rel. 34, Last annotation update)

DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).

GN PRNP.

OS Ateles paniscus (Black spider monkey).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

OC Mammalia; Eutheria; Primates; Platyrrhini; Cebidae; Ateleinae; Ateles.

NCBI_TaxID=9510;

[1]

RP SEQUENCE FROM N.A.

RC TISSUE=Brain;

MEDLINE=95083661; PubMed=7991600;

RA Cervenakova L., Brown P., Goldfarb L.G., Nagle J., Pettrone K.,

RA Rubenstein R., Dubnick M., Gibbs C.J., Gajdusek D.C.;

RT "Infectious amyloid precursor gene sequences in primates used for

RT experimental transmission of human spongiform encephalopathy.";

Proc. Natl. Acad. Sci. U.S.A. 91:12159-12162(1994).

-1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE

-1- HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.

-1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED

"RODS".

-1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.

-1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND

ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,

CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME

(GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),

TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.

-1- SIMILARITY: BELONGS TO THE PRION FAMILY.

THIS SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See <http://www.isb-sib.ch/announce/> or send an email to license@isb-sib.ch).

EMBL; U51564; AAA68634.1; -

HSSP; P04156; IEIG.

InterPro; IPR000817; Prion.

Pfam; PF00377; prion.1.

PRINTS; PR00341; PRION.

SMART; SM00157; PRP.1.

PROSITE; PS00291; PRION_1; 1.

PROSITE; PS00706; PRION_2; 1.

KW Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.

FT SIGNAL 1 22

FT CHAIN 23 229

FT PROPEP 230 252

FT LIPID 229 229

FT DISULFID 178 213

FT CARBOHYD 180 180

FT CARBOHYD 196 196

FT DOMAIN 51 90

FT REPEAT 51 58

FT REPEAT 59 66

FT REPEAT 67 74

FT REPEAT 75 82

FT REPEAT 83 90

FT REPEAT 90 5

FT REPEAT 5 27718

FT REPEAT 27718 MM; 20EA38A42DC56D1 CRC64;

SQ SEQUENCE 252 AA; 27718 MM; 20EA38A42DC56D1 CRC64;

Query Match 80.4%; Score 41; DB 1; Length 252;
 Best Local Similarity 61.5%; Pred. No. 0.012; Mismatches 5; Indels 0; Gaps 0;

QY 1 CXTQYXXSXAXY 13

Db 213 CITOYERESQAVY 225

AC P40247; 01-FEB-1995 (Rel. 31, Created)

DT 01-FEB-1995 (Rel. 31, Last sequence update)

DT 01-OCT-1996 (Rel. 34, Last annotation update)

DE Major prion protein precursor (PrP) (PrP27-30) (PrP33-35C).

GN PRNP.

OS Callithrix jacchus (Common marmoset).

OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

OC Mammalia; Eutheria; Primates; Platyrrhini; Callitrichidae;

NCBI_TaxID=9483;

[1]

RP SEQUENCE FROM N.A.

RC TISSUE=Brain;

MEDLINE=95139066; PubMed=7837269;

RA Schatzl H.M., Dacosta M., Taylor L., Cohen F.E., Prusiner S.B.;

RT "Prion protein gene variation among primates.";

J. Mol. Biol. 245:362-374(1995).

-1- FUNCTION: THE FUNCTION OF PRP IS NOT KNOWN. PRP IS ENCODED IN THE

-1- HOST GENOME AND IS EXPRESSED BOTH IN NORMAL AND INFECTED CELLS.

-1- SUBUNIT: PRP HAS A TENDENCY TO AGGREGATE YIELDING POLYMERS CALLED

"RODS".

-1- SUBCELLULAR LOCATION: Attached to the membrane by a GPI-anchor.

-1- DISEASE: PRP IS FOUND IN HIGH QUANTITY IN THE BRAIN OF HUMANS AND

ANIMALS INFECTED WITH THE DEGENERATIVE NEUROLOGICAL DISEASES KURU,

CREUTZFELDT-JAKOB DISEASE (CJD), GERSTMAN-STRAUSSLER SYNDROME

(GSS), SCRAPIE, BOVINE SPONGIFORM ENCEPHALOPATHY (BSE),

TRANSMISSIBLE MINK ENCEPHALOPATHY (TME), ETC.

-1- SIMILARITY: BELONGS TO THE PRION FAMILY.

THIS SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as long as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See <http://www.isb-sib.ch/announce/> or send an email to license@isb-sib.ch).

EMBL; U08304; AAC50092.1; -

HSSP; P04925; JAG2.

InterPro; IPR000817; Prion.

Pfam; PF00377; prion.1.

PRINTS; PR00341; PRION.

SMART; SM00157; PRP.1.

PROSITE; PS00291; PRION_1; 1.

PROSITE; PS00706; PRION_2; 1.

KW Prion; Brain; Glycoprotein; GPI-anchor; Repeat; Signal.

FT SIGNAL 1 22

FT CHAIN 23 229

FT PROPEP 230 252

FT LIPID 229 229

FT DISULFID 178 213

FT CARBOHYD 180 180

FT CARBOHYD 196 196

FT DOMAIN 51 90

FT REPEAT 51 58

FT REPEAT 59 66

FT REPEAT 67 74

FT REPEAT 75 82

FT REPEAT 83 90

FT REPEAT 90 5

FT REPEAT 5 27639

FT REPEAT 27639 MM; B2800B60F5DCE664 CRC64;

Query Match 80.4%; Score 41; DB 1; Length 252;
 Best Local Similarity 61.5%; Pred. No. 0.012; Mismatches 5; Indels 0; Gaps 0;

	Matches	8; Conservative	0; Mismatches	5; Indels	0; Gaps
Qy	1	CKPYXXESXAY	13		
Db	213	CIQYEEKESQAY	225		

Matches	8; Conservative	0;	Mismatches	5;	Indels	0;	Gaps	0;
QY	1	CXTQYXXESXAY	13					
Db	213	CITQYERESQAY	225					

Search completed: March 24, 2003, 17:20:17
Job time : 7.85417 secs

Query Match	Best Local Similarity	Score 41; DB 1; Length 252;
80.4%;	61.5%;	Pred. No. 0.012;
Query Match	Best Local Similarity	Score 41; DB 1; Length 252;
80.4%;	61.5%;	Pred. No. 0.012;

GenCore version 5.1.4-p5-4578
Copyright (c) 1993 - 2003 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: March 24, 2003, 17:19:46 ; Search time 28.4375 Seconds
(without alignments)
94.193 Million cell updates/sec

Title: us-09-508-828b-3
Perfect score: 51
Sequence: 1 CXTQYXXESXAXY 13

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 671580 seqs, 206047115 residues

Total number of hits satisfying chosen parameters: 671580

Minimum DB seq length: 0
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database :

SPTREMBL_21:*
1: sp_archaea:*
2: sp_bacteria:*
3: sp_fungi:*
4: sp_human:*
5: sp_invertebrate:*
6: sp_mammal:*
7: sp_mhc:*
8: sp_organelle:*
9: sp_phage:*
10: sp_plant:*
11: sp_rodent:*
12: sp_virus:*
13: sp_vertebrate:*
14: sp_unclassified:*
15: sp_virus:*
16: sp_bacteriophage:*
17: sp_archaeap:*

Pred. NO. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Length	DB ID	Description
1	42	82.4	243 11 P97895	P97895 mesocricetu
2	42	82.4	254 6 O9TSP8	O9TSP8 ocytolagus
3	41	80.4	195 6 O97903	O97903 adax nasom
4	41	80.4	195 6 O97693	O97693 canis lupus
5	41	80.4	200 6 O97912	O97912 bison bonas
6	41	80.4	202 6 O97908	O97908 capra nubia
7	41	80.4	212 6 O97698	O97698 cervus elap
8	41	80.4	213 6 O97V04	O97V04 canis fami
9	41	80.4	214 6 O97V03	O97V03 canis fami
10	41	80.4	215 6 O97904	O97904 bos javanic
11	41	80.4	216 6 O97V00	O97V00 bos taurus
12	41	80.4	220 6 O02825	O02825 odocolleus
13	41	80.4	223 6 O97910	O97910 hippotragus
14	41	80.4	226 6 O97907	O97907 gazella sub
15	41	80.4	227 6 O97909	O97909 tragelaphus
16	41	80.4	233 4 P78446	P78446 homo sapien

17	41	80.4	235 6 O97695	O97695 gliraffa cam
18	41	80.4	240 11 O8VHV4	O8VHV4 microtus ag
19	41	80.4	245 4 O15216	O15216 homo sapien
20	41	80.4	245 6 O9MZU7	O9MZU7 odocolleus
21	41	80.4	246 4 O60489	O60489 homo sapien
22	41	80.4	248 11 O8VHV5	O8VHV5 clethrionom
23	41	80.4	253 4 O8UP19	O8UP19 homo sapien
24	41	80.4	253 4 O96E70	O96E70 homo sapien
25	41	80.4	253 4 O8TBG0	O8TBG0 homo sapien
26	41	80.4	253 11 O9Z0T5	O9Z0T5 meriones un
27	41	80.4	254 11 O9Z0T4	O9Z0T4 sigmodon fu
28	41	80.4	254 11 O9QYR9	O9QYR9 mus musculu
29	41	80.4	254 11 O8VHV6	O8VHV6 apodemus sy
30	41	80.4	256 6 O9TV01	O9TV01 capra hircu
31	41	80.4	256 6 O9TV07	O9TV07 capra hircu
32	41	80.4	256 6 O9TTU5	O9TTU5 ovis aries
33	41	80.4	256 6 O9MZU8	O9MZU8 ovis aries
34	41	80.4	256 6 O95N12	O95N12 ovis aries
35	41	80.4	256 6 O95M08	O95M08 budorcas ta
36	41	80.4	256 6 O02841	O02841 odocolleus
37	41	80.4	256 6 O62670	O62670 cervus elap
38	41	80.4	256 6 O46648	O46648 capra hircu
39	41	80.4	256 6 O8SPV7	O8SPV7 capra hircu
40	41	80.4	256 6 O8SPV6	O8SPV6 capra hircu
41	41	80.4	256 6 O8SPV5	O8SPV5 capra hircu
42	41	80.4	256 6 O8SPV4	O8SPV4 capra hircu
43	41	80.4	257 6 O46593	O46593 canis fami
44	41	80.4	264 6 O9MZU6	O9MZU6 antilocapra
45	41	80.4	285 4 O75942	O75942 homo sapien

ALIGNMENTS

RESULT 1

ID	P97895	PRELIMINARY;	PRT;	243 AA.
AC	P97895;			
DT	01-MAY-1997 (TREMBLrel. 03, Created)			
DT	01-MAY-1997 (TREMBLrel. 03, Last sequence update)			
DT	01-JUN-2001 (TREMBLrel. 17, Last annotation update)			
DE	Scrapie prion (PRP 27-30) (PRP 27-30 protein) (Fragment).			
OS	Mesocricetus auratus (Golden hamster).			
OC	Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;			
OC	Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Cricetinae;			
OC	Mesocricetus.			
OX	NCBI_TaxID=10036;			
RN	[1]			
RP	SEQUENCE FROM N.A.			
RA	MEDLINE=87108309; PubMed=3100471;			
RA	McKinley M.P., Prusiner S.B.;			
RT	"Biology and structure of scrapie prions.";			
RL	Int. Rev. Neurobiol. 28:1-57(1986).			
RN	[2]			
RP	SEQUENCE OF 79-223 FROM N.A.			
RA	MEDLINE=85176927; PubMed=2859120;			
RA	Oesch B., Westaway D., Waelchli M., McKinley M.P., Kent S.B.,			
RA	Aebbersold R.H., Barry R.A., Tempst P., Teplow D.B., Hood L.E.,			
RA	Prusiner S.B., Weissmann C.;			
RT	"A cellular gene encodes scrapie PrP 27-30 protein.";			
RL	Cell 40:735-746(1985).			
DR	EMBL; M37381; AAA37090.1; -			
DR	EMBL; K02344; AAA37093.1; -			
DR	HSSP; P04273; 1B10.			
DR	InterPro: IPR000817; Prion.			
DR	Pfam: PF00377; prion. 1.			
DR	PRINTS; PR00341; PRION.			
DR	SMART; SM00157; PRP; 1.			
DR	PROSITE; PS00291; PRION_1; 1.			
DR	PROSITE; PS00706; PRION_2; 1.			
KW	Prion.			
FT	NON_TER			
SO	SEQUENCE	243 AA;	26643 MW;	4F53612BBFF240F9 CRC64;

Query Match 82.4%; Score 42; DB 11; Length 243;
 Best Local Similarity 61.5%; Pred. No. 0.017;
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTQYXXESXAY 13
 |||||
 DB 203 CTVQYQESQAY 215

RESULT 2
 ID 09TSE8 PRELIMINARY; PRT; 254 AA.
 AC 09TSE8;
 DT 01-MAY-2000 (TREMblrel. 13, Created)
 DT 01-MAY-2000 (TREMblrel. 13, Last sequence update)
 DT 01-JUN-2002 (TREMblrel. 21, Last annotation update)
 DE Prion protein.
 GN PRP.
 OS Oryctolagus cuniculus (Rabbit).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Lagomorpha; Leporidae; Oryctolagus.
 OX NCBI_TaxID=9986;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE-99391519; PubMed-10463862;
 RA Rubenstein R., Kascsak R.J., Papini M., Kascsak R., Carp R.I.,
 RA Lafuente G., Meleiro R., Langeveld J.;
 RT "Immune surveillance and antigen conformation determines humoral
 immune response to the prion protein immunogen.";
 RT J. Neurovirol. 5:401-413(1999).
 DR EMBL: AF015603; AAD01554.1; -;
 DR HSSP: P10279; IDMY.
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; prion. 1.
 DR PRINTS: PR00341; PRION.
 DR SMART: SM00157; PRP; 1.
 DR PROSITE: PS00291; PRION_1; 1.
 DR PROSITE: PS00706; PRION_2; 1.
 SQ SEQUENCE 254 AA; 27546 MW; 30066042D24BDF55 CRC64;

Query Match 82.4%; Score 42; DB 6; Length 254;
 Best Local Similarity 61.5%; Pred. No. 0.017;
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTQYXXESXAY 13
 |||||
 DB 215 CTVQYQESQAY 227

RESULT 3
 ID 097903 PRELIMINARY; PRT; 195 AA.
 AC 097903;
 DT 01-MAY-1999 (TREMblrel. 10, Created)
 DT 01-MAY-1999 (TREMblrel. 10, Last sequence update)
 DT 01-JUN-2002 (TREMblrel. 21, Last annotation update)
 DE Prion protein (Fragment).
 GN PRP.
 OS Addax nasomaculatus.
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
 OC Bovidae; Hippotraginae; Addax.
 OX NCBI_TaxID=55915;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC TISSUE=PRP;
 RX MEDLINE-99303687; PubMed-10373359;
 RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
 RA Schwarz T.F., Werner T., Schatzl H.M.;
 RT "Analysis of 27 mammalian and 9 avian PRPs reveals high conservation
 of flexible regions of the prion protein.";
 RT J. Mol. Biol. 289:1163-1178(1999).
 DE Prion protein (Fragment).

DR EMBL: AF117309; AAD19980.1; -;
 DR HSSP: P10279; IDMY.
 DR InterPro: IPR002395; Kininogen.
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; prion. 1.
 DR PRINTS: PR00341; KININOGEN.
 DR PRINTS: PR00341; PRION.
 DR SMART: SM00157; PRP; 1.
 DR PROSITE: PS00291; PRION_1; 1.
 DR PROSITE: PS00706; PRION_2; 1.
 FT NON_TER 1 1
 FT NON_TER 195 195
 SQ SEQUENCE 195 AA; 21321 MW; 6A9BAG7E1AFEC9 CRC64;

Query Match 80.4%; Score 41; DB 6; Length 195;
 Best Local Similarity 61.5%; Pred. No. 0.023;
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTQYXXESXAY 13
 |||||
 DB 181 CTVQYQESQAY 193

RESULT 4
 ID 097693 PRELIMINARY; PRT; 195 AA.
 AC 097693;
 DT 01-MAY-1999 (TREMblrel. 10, Created)
 DT 01-MAY-1999 (TREMblrel. 10, Last sequence update)
 DT 01-DEC-2001 (TREMblrel. 19, Last annotation update)
 DE Prion protein (Fragment).
 GN PRP.
 OS Canis lupus (Gray wolf).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.
 OX NCBI_TaxID=9612;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE-99303687; PubMed-10373359;
 RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
 RA Schwarz T.F., Werner T., Schatzl H.M.;
 RT "Analysis of 27 mammalian and 9 avian PRPs reveals high conservation
 of flexible regions of the prion protein.";
 RT J. Mol. Biol. 289:1163-1178(1999).
 DR EMBL: AF113939; AAD12063.1; -;
 DR HSSP: P04925; IAG2.
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; prion. 1.
 DR PRINTS: PR00341; PRION.
 DR SMART: SM00157; PRP; 1.
 DR PROSITE: PS00291; PRION_1; 1.
 DR PROSITE: PS00706; PRION_2; 1.
 FT NON_TER 1 1
 FT NON_TER 195 195
 SQ SEQUENCE 195 AA; 21097 MW; 9D18E4EB9AA5D031 CRC64;

Query Match 80.4%; Score 41; DB 6; Length 195;
 Best Local Similarity 61.5%; Pred. No. 0.023;
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTQYXXESXAY 13
 |||||
 DB 177 CTVQYQESQAY 189

RESULT 5
 ID 097912 PRELIMINARY; PRT; 200 AA.
 AC 097912;
 DT 01-MAY-1999 (TREMblrel. 10, Created)
 DT 01-MAY-1999 (TREMblrel. 10, Last sequence update)
 DT 01-JUN-2002 (TREMblrel. 21, Last annotation update)
 DE Prion protein (Fragment).

GN PRP.
 OS Bison bonasus (European bison).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
 OC Bovidae; Bovinae; Bison.
 NCBI_TaxID=9902;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC TISSUE=PBL;
 RX MEDLINE=99303687; PubMed=10373359;
 RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
 RT Schwarz T.F., Werner T., Schatzl H.M.;
 RT Analysis of 27 mammalian and 9 avian PRPs reveals high conservation
 of flexible regions of the prion protein.";
 RL J. Mol. Biol. 289:1163-1178(1999).
 DR EMBL: AF117328; AAD19990.1;
 DR HSSP: P10279; IDWY.
 DR InterPro: IPR002395; Kininogen.
 DR InterPro: IPR001610; PAC.
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; Prion; 1.
 DR PRINTS: PR00334; KININOGEN.
 DR PRINTS: PR00341; PRION.
 DR SMART: SM00086; PAC; 1.
 DR SMART: SM00157; PRP; 1.
 DR PROSITE: PS00291; PRION_1; 1.
 DR PROSITE: PS00706; PRION_2; 1.
 FT NON_TER 1
 FT NON_TER 1
 SQ SEQUENCE 200 AA; 21674 MM; 1F270CDF4BE5771B CRC64;
 Query Match 80.4%; Score 41; DB 6; Length 200;
 Best Local Similarity 61.5%; Pred. No. 0.024;
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
 QY 1 CXTQYXXESXAXY 13
 DB 182 CITOYQRESEAVY 194
 ID 097908 PRELIMINARY; PRT; 202 AA.
 AC 097908;
 DT 01-MAY-1999 (TREMBLrel. 10, Created)
 DT 01-MAY-1999 (TREMBLrel. 10, Last sequence update)
 DT 01-JUN-2002 (TREMBLrel. 21, Last annotation update)
 DE Prion protein (Fragment).
 GN PRP.
 OS Capra nubiana (Nubian ibex).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
 OC Bovidae; Caprinae; Capra.
 NCBI_TaxID=72543;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC TISSUE=PBL;
 RX MEDLINE=99303687; PubMed=10373359;
 RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
 RT Schwarz T.F., Werner T., Schatzl H.M.;
 RT Analysis of 27 mammalian and 9 avian PRPs reveals high conservation
 of flexible regions of the prion protein.";
 RL J. Mol. Biol. 289:1163-1178(1999).
 DR EMBL: AF117319; AAD19990.1;
 DR HSSP: P10279; IDWY.
 DR InterPro: IPR002395; Kininogen.
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; Prion; 1.
 DR PRINTS: PR00334; KININOGEN.
 DR PRINTS: PR00341; PRION.
 DR SMART: SM00157; PRP; 1.
 DR PROSITE: PS00291; PRION_1; 1.
 DR PROSITE: PS00706; PRION_2; 1.
 FT NON_TER 1
 FT NON_TER 1
 SQ SEQUENCE 212 AA; 23032 MM; 57E58BDF5E2A1B5 CRC64;
 Query Match 80.4%; Score 41; DB 6; Length 212;
 Best Local Similarity 61.5%; Pred. No. 0.025;
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
 QY 1 CXTQYXXESXAXY 13
 DB 181 CITOYQRESEAVY 193
 ID 097904 PRELIMINARY; PRT; 213 AA.
 AC 097904;
 DT 01-MAY-2000 (TREMBLrel. 13, Created)
 DT 01-MAY-2000 (TREMBLrel. 13, Last sequence update)
 DT 01-DEC-2001 (TREMBLrel. 19, Last annotation update)
 DE Prion protein (Fragment).

FT NON_TER 1
 FT NON_TER 1
 SQ SEQUENCE 202 AA; 21949 MM; DB0634A43B4DB77F CRC64;
 Query Match 80.4%; Score 41; DB 6; Length 202;
 Best Local Similarity 61.5%; Pred. No. 0.024;
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
 QY 1 CXTQYXXESXAXY 13
 DB 189 CITOYQRESEAVY 201
 ID 097698 PRELIMINARY; PRT; 212 AA.
 AC 097698;
 DT 01-MAY-1999 (TREMBLrel. 10, Created)
 DT 01-MAY-1999 (TREMBLrel. 10, Last sequence update)
 DT 01-JUN-2002 (TREMBLrel. 21, Last annotation update)
 DE Prion protein (Fragment).
 GN PRP.
 OS Cervus elaphus canadensis (wapiti).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Cervidae;
 OC Cervidae; Cervinae; Cervus.
 NCBI_TaxID=9861;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=97317556; PubMed=9174569;
 RA Schatzl H.M., Wopfinger F., Gilch S., von Brunn A., Jager G.,
 RT "Is codon 129 of prion protein polymorphic in human beings but not in
 animals?"
 RL Lancet 349:1603-1604(1997).
 RN [2]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=99303687; PubMed=10373359;
 RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
 RT Schwarz T.F., Werner T., Schatzl H.M.;
 RT Analysis of 27 mammalian and 9 avian PRPs reveals high conservation
 of flexible regions of the prion protein.";
 RL J. Mol. Biol. 289:1163-1178(1999).
 DR EMBL: AF113945; AAD13293.1;
 DR HSSP: P10279; IDWY.
 DR InterPro: IPR002395; Kininogen.
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; Prion; 1.
 DR PRINTS: PR00334; KININOGEN.
 DR PRINTS: PR00341; PRION.
 DR SMART: SM00157; PRP; 1.
 DR PROSITE: PS00291; PRION_1; 1.
 DR PROSITE: PS00706; PRION_2; 1.
 FT NON_TER 1
 FT NON_TER 1
 SQ SEQUENCE 212 AA; 23032 MM; 57E58BDF5E2A1B5 CRC64;
 Query Match 80.4%; Score 41; DB 6; Length 212;
 Best Local Similarity 61.5%; Pred. No. 0.025;
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
 QY 1 CXTQYXXESXAXY 13
 DB 181 CITOYQRESEAVY 193
 ID 097904 PRELIMINARY; PRT; 213 AA.
 AC 097904;
 DT 01-MAY-2000 (TREMBLrel. 13, Created)
 DT 01-MAY-2000 (TREMBLrel. 13, Last sequence update)
 DT 01-DEC-2001 (TREMBLrel. 19, Last annotation update)
 DE Prion protein (Fragment).

GN PRP.
 OS Canis familiaris (Dog).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.
 OX NCBI_TaxID=9615;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=99303687; PubMed=10373359;
 RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
 RT "Analysis of 27 mammalian and 9 avian PRPs reveals high conservation
 of flexible regions of the prion protein.";
 RL J. Mol. Biol. 289:1163-1178(1999).
 DR EMBL; AF113937; AAD12061.1;
 DR HSSP; P04925; 1AG2.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; prion.1.
 DR PRINTS; PR00341; PRION.
 DR SMART; SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 FT NON_TER 1
 FT NON_TER 1
 SO SEQUENCE 213 AA; 22997 MW; 26A224EF5E7A0507 CRC64;
 Query Match 80.4%; Score 41; DB 6; Length 213;
 Best Local Similarity 61.5%; Pred. No. 0.026;
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
 -OY 1 CXTQYXXESXAY 13
 Db 177 CXTQYKESAY 189
 RESULT 9
 O9TV03 PRELIMINARY; PRT; 214 AA.
 ID O9TV03
 AC O9TV03
 DT 01-MAY-2000 (TREMBLrel. 13, Created)
 DT 01-MAY-2000 (TREMBLrel. 13, Last sequence update)
 DT 01-DEC-2001 (TREMBLrel. 19, Last annotation update)
 DE Prion protein (Fragment).
 GN PRP.
 OS Canis familiaris (Dog).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Carnivora; Fissipedia; Canidae; Canis.
 OX NCBI_TaxID=9615;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX STRAIN-BREED DACHSHUND;
 RX MEDLINE=99303687; PubMed=10373359;
 RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
 RT "Analysis of 27 mammalian and 9 avian PRPs reveals high conservation
 of flexible regions of the prion protein.";
 RL J. Mol. Biol. 289:1163-1178(1999).
 DR EMBL; AF113938; AAD12062.1;
 DR HSSP; P04925; 1AG2.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; prion.1.
 DR PRINTS; PR00341; PRION.
 DR SMART; SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 FT NON_TER 1
 FT NON_TER 1
 SO SEQUENCE 214 AA; 23167 MW; 551B7669ABD4C6DF CRC64;
 Query Match 80.4%; Score 41; DB 6; Length 214;
 Best Local Similarity 61.5%; Pred. No. 0.026;
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTQYXXESXAY 13
 Db 177 CXTQYKESAY 189
 RESULT 10
 O9TV04 PRELIMINARY; PRT; 215 AA.
 ID O9TV04
 AC O9TV04
 DT 01-MAY-1999 (TREMBLrel. 10, Created)
 DT 01-MAY-1999 (TREMBLrel. 10, Last sequence update)
 DT 01-JUN-2002 (TREMBLrel. 21, Last annotation update)
 DE Prion protein (Fragment).
 GN PRP.
 OS Bos javanicus (Wild banteng).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
 OC Bovidae; Bovinae; Bos.
 OX NCBI_TaxID=9906;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=99303687; PubMed=10373359;
 RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
 RT "Analysis of 27 mammalian and 9 avian PRPs reveals high conservation
 of flexible regions of the prion protein.";
 RL J. Mol. Biol. 289:1163-1178(1999).
 DR EMBL; AF117310; AAD19981.1;
 DR HSSP; P10279; 1DWT.
 DR InterPro; IPR002395; Kininogen.
 DR InterPro; IPR001610; PAC.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; prion.1.
 DR PRINTS; PR00334; KININOGEN.
 DR PRINTS; PR00341; PRION.
 DR SMART; SM00086; PAC; 1.
 DR SMART; SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 FT NON_TER 1
 FT NON_TER 1
 SO SEQUENCE 215 AA; 23182 MW; 97A36721B1E73A66 CRC64;
 Query Match 80.4%; Score 41; DB 6; Length 215;
 Best Local Similarity 61.5%; Pred. No. 0.026;
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
 OY 1 CXTQYXXESXAY 13
 Db 190 CXTQYKESAY 202
 RESULT 11
 O9TV00 PRELIMINARY; PRT; 216 AA.
 ID O9TV00
 AC O9TV00
 DT 01-MAY-2000 (TREMBLrel. 13, Created)
 DT 01-MAY-2000 (TREMBLrel. 13, Last sequence update)
 DT 01-JUN-2002 (TREMBLrel. 21, Last annotation update)
 DE Prion protein (Fragment).
 GN PRP.
 OS Bos taurus (Bovine).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
 OC Bovidae; Bovinae; Bos.
 OX NCBI_TaxID=9913;
 RN [1]
 RP SEQUENCE FROM N.A.
 RX MEDLINE=99303687; PubMed=10373359;
 RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
 RT "Analysis of 27 mammalian and 9 avian PRPs reveals high conservation
 of flexible regions of the prion protein.";
 RL J. Mol. Biol. 289:1163-1178(1999).
 DR EMBL; AF117310; AAD19981.1;
 DR HSSP; P10279; 1DWT.
 DR InterPro; IPR002395; Kininogen.
 DR InterPro; IPR001610; PAC.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; prion.1.
 DR PRINTS; PR00334; KININOGEN.
 DR PRINTS; PR00341; PRION.
 DR SMART; SM00086; PAC; 1.
 DR SMART; SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 FT NON_TER 1
 FT NON_TER 1
 SO SEQUENCE 215 AA; 23182 MW; 97A36721B1E73A66 CRC64;
 Query Match 80.4%; Score 41; DB 6; Length 215;
 Best Local Similarity 61.5%; Pred. No. 0.026;
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

Analysis of 27 mammalian and 9 avian PRPs reveals high conservation of flexible regions of the prion protein.
 RT J. Mol. Biol. 289:1163-1178(1999).
 DR EMBL: AF117327; AAD1998.1; -
 DR HSSP: P10279; IDWY.
 DR InterPro: IPR001610; PAC.
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; Prion; 1.
 DR PRINTS: PR00341; PRION.
 DR SMART: SM00086; PAC; 1.
 DR SMART: SM00157; PRP; 1.
 DR PROSITE: PS00291; PRION_1; 1.
 DR PROSITE: PS00706; PRION_2; 1.
 FT NON_TER 1
 FT NON_TER 1
 SQ SEQUENCE 216 AA; 23425 MW; BE6BECF479966730 CRC64;
 Query Match 80.4%; Score 41; DB 6; Length 216;
 Best Local Similarity 61.5%; Pred. No. 0.026;
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
 QY 1 CXTQYXESXAY 13
 DB 185 CITOYQRESQAY 197
 RESULT 12
 ID 002825 PRELIMINARY; PRT: 220 AA.
 AC 002825;
 DT 01-JUL-1997 (TREMBLrel. 04, Created)
 DT 01-JUL-1997 (TREMBLrel. 04, Last sequence update)
 DT 01-JUN-2002 (TREMBLrel. 21, Last annotation update)
 DE Prion protein (Fragment).
 GN PRP.
 OS Odocoleus hemionus hemionus.
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Cervidae;
 OC Cervidae; Odocolleinae; Odocolleus.
 NCBI_Taxid=96877;
 [1]
 RN
 RP SEQUENCE FROM N.A.
 RC TISSUE-BRAIN;
 RA O'Rourke K.I., Spraker T.R., Miller M.W., Williams E.S.;
 RT "Three alleles of the prion protein gene in mule deer (Odocoileus hemionus hemionus) with chronic wasting disease."
 RL Submitted (Apr-1997) to the EMBL/GenBank/DBJ databases.
 DR EMBL: U97331; AAB61573.1; -
 DR HSSP: P10279; IDWY.
 DR InterPro: IPR002395; Kininogen.
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; Prion; 1.
 DR PRINTS: PR00341; KININOGEN.
 DR PRINTS: PR00341; PRION.
 DR SMART: SM00157; PRP; 1.
 DR PROSITE: PS00291; PRION_1; 1.
 DR PROSITE: PS00706; PRION_2; 1.
 FT NON_TER 1
 FT NON_TER 1
 SQ SEQUENCE 220 AA; 23947 MW; D3AC97D5A152AA73 CRC64;
 Query Match 80.4%; Score 41; DB 6; Length 220;
 Best Local Similarity 61.5%; Pred. No. 0.027;
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
 QY 1 CXTQYXESXAY 13
 DB 194 CITOYQRESQAY 206
 RESULT 13
 ID 097910 PRELIMINARY; PRT: 223 AA.

AC 097910;
 DT 01-MAY-1999 (TREMBLrel. 10, Created)
 DT 01-MAY-1999 (TREMBLrel. 10, Last sequence update)
 DT 01-JUN-2002 (TREMBLrel. 21, Last annotation update)
 DE Prion protein (Fragment).
 GN PRP.
 OS Hippotragus niger (Sable antelope).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
 OC Bovidae; Hippotraginae; Hippotragus.
 NCBI_Taxid=37189;
 [1]
 RN
 RP SEQUENCE FROM N.A.
 RC TISSUE-PBL;
 RX MEDLINE=99303687; PubMed=10373359;
 RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
 RT "Analysis of 27 mammalian and 9 avian PRPs reveals high conservation of flexible regions of the prion protein."
 RT J. Mol. Biol. 289:1163-1178(1999).
 DR EMBL: AF117323; AAD19994.1; -
 DR HSSP: P10279; IDWY.
 DR InterPro: IPR002395; Kininogen.
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; Prion; 1.
 DR PRINTS: PR00341; KININOGEN.
 DR PRINTS: PR00341; PRION.
 DR SMART: SM00157; PRP; 1.
 DR PROSITE: PS00291; PRION_1; 1.
 DR PROSITE: PS00706; PRION_2; 1.
 FT NON_TER 1
 FT NON_TER 1
 SQ SEQUENCE 223 AA; 24172 MW; 77A95AC13080F416 CRC64;
 Query Match 80.4%; Score 41; DB 6; Length 223;
 Best Local Similarity 61.5%; Pred. No. 0.027;
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
 QY 1 CXTQYXESXAY 13
 DB 190 CITOYQRESQAY 202
 RESULT 14
 ID 097907 PRELIMINARY; PRT: 226 AA.
 AC 097907;
 DT 01-MAY-1999 (TREMBLrel. 10, Created)
 DT 01-MAY-1999 (TREMBLrel. 10, Last sequence update)
 DT 01-JUN-2002 (TREMBLrel. 21, Last annotation update)
 DE Prion protein (Fragment).
 GN PRP.
 OS Gazella subgutturosa (Giltred gazelle).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
 OC Bovidae; Antilopinae; Gazella.
 NCBI_Taxid=59529;
 [1]
 RN
 RP SEQUENCE FROM N.A.
 RC TISSUE-PBL;
 RX MEDLINE=99303687; PubMed=10373359;
 RA Wopfinger F., Weidenhofer G., Schneider R., von Brunn A., Gilch S.,
 RT "Analysis of 27 mammalian and 9 avian PRPs reveals high conservation of flexible regions of the prion protein."
 RT J. Mol. Biol. 289:1163-1178(1999).
 DR EMBL: AF117313; AAD19984.1; -
 DR HSSP: P10279; IDWY.
 DR InterPro: IPR002395; Kininogen.
 DR InterPro: IPR000817; Prion.
 DR Pfam: PF00377; Prion; 1.
 DR PRINTS: PR00341; KININOGEN.
 DR PRINTS: PR00341; PRION.

DR SMART; SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 FT NON_TER 1
 FT VARIANT 209 209 R -> K.
 FT NON_TER 226 226
 SO SEQUENCE 226 AA; 24384 MW; D845E27B219ABD2F CRC64;

Query Match 80.4%; Score 41; DB 6; Length 226;
 Best Local Similarity 61.5%; Pred. No. 0.027;
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTQYXXESKXAY 13
 Db 195 CXTQYRRESQAY 207

RESULT 15

O97909 PRELIMINARY; PRT; 227 AA.
 AC O97909;
 DT 01-MAY-1999 (TREMblrel. 10, Created)
 DT 01-MAY-1999 (TREMblrel. 10, Last sequence update)
 DT 01-JUN-2002 (TREMblrel. 21, Last annotation update)
 DE Prion protein (Fragment).
 GN PRP.
 OS Tragejaphus angasi (Nyala).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae;
 OC Bovidae; Bovinae; Tragelaphus.
 OX NCBI_TaxID=66437;
 RN [1]
 RP SEQUENCE FROM N.A.
 RC TISSUE=PBL;
 RX MEDLINE=99303687; PubMed=10373359;
 RA Wopfner F., Weidenhofer G., Schneider R., von Bruhn A., Gluch S.,
 RA Schwarz T.F., Werner T., Schatzl H.M.;
 RT "Analysis of 27 mammalian and 9 avian PRPs reveals high conservation
 of flexible regions of the prion protein.";
 RL J. Mol. Biol. 289:1163-1178(1999).
 DR EMBL; AF117321; AAD19992.1; -.
 DR HSSP; P10279; IDWY.
 DR InterPro; IPR002395; KlnInogen.
 DR InterPro; IPR000817; Prion.
 DR Pfam; PF00377; prion.1.
 DR PRINTS; PRO0334; KININOGEN.
 DR PRINTS; PRO0341; PRION.
 DR SMART; SM00157; PRP; 1.
 DR PROSITE; PS00291; PRION_1; 1.
 DR PROSITE; PS00706; PRION_2; 1.
 FT NON_TER 1
 FT NON_TER 227 227
 SO SEQUENCE 227 AA; 24651 MW; 99FD0BAF0B6A0077 CRC64;

Query Match 80.4%; Score 41; DB 6; Length 227;
 Best Local Similarity 61.5%; Pred. No. 0.027;
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTQYXXESKXAY 13
 Db 201 CXTQYRRESQAY 213

Search completed: March 24, 2003, 17:22:11
 Job time : 28.4375 secs

GenCore version 5.1.4-p5.4578
Copyright (c) 1993 - 2003 Compugen Ltd.

OM protein - protein search, using sw model

Run on: March 24, 2003, 17:20:26 ; Search time 12.4583 Seconds
(without alignments)
30.702 Million cell updates/sec

Title: US-09-508-828B-3

Perfect score: 51
Sequence: 1 CXTQYXXESXAXY 13

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 262574 seqs, 29422922 residues

Total number of hits satisfying chosen parameters: 262574

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%
Listing first 45 summaries

Database : Issued_Patents_AA:*

1: /cgn2_6/ptodata/2/1aa/5A.COMB.pep:*
2: /cgn2_6/ptodata/2/1aa/5B.COMB.pep:*
3: /cgn2_6/ptodata/2/1aa/6A.COMB.pep:*
4: /cgn2_6/ptodata/2/1aa/6B.COMB.pep:*
5: /cgn2_6/ptodata/2/1aa/PCTUS.COMB.pep:*
6: /cgn2_6/ptodata/2/1aa/backfilltest.pep:*

Pred. No. is the number of results predicted by chance to have a
score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	42	82.4	142	1	US-08-556-823-2
2	42	82.4	254	4	US-09-128-450-26
3	42	82.4	254	4	US-09-823-494-26
4	41	80.4	15	1	US-08-244-701B-48
5	41	80.4	15	4	US-09-076-721-48
6	41	80.4	17	4	US-09-353-348-3
7	41	80.4	22	1	US-08-244-701B-33
8	41	80.4	22	1	US-08-244-701B-33
9	41	80.4	22	1	US-08-244-701B-33
10	41	80.4	22	1	US-08-244-701B-33
11	41	80.4	22	4	US-09-076-721-35
12	41	80.4	22	4	US-09-076-721-35
13	41	80.4	24	1	US-08-244-701B-62
14	41	80.4	24	4	US-09-076-721-62
15	41	80.4	25	4	US-09-353-348-7
16	41	80.4	142	1	US-08-556-823-10
17	41	80.4	253	1	US-08-242-188-2
18	41	80.4	253	1	US-08-509-261A-2
19	41	80.4	253	1	US-08-660-626-8
20	41	80.4	253	1	US-08-692-892-2
21	41	80.4	253	2	US-08-713-939A-2
22	41	80.4	253	2	US-08-868-162A-22
23	41	80.4	253	4	US-09-031-168-8
24	41	80.4	253	4	US-09-128-450-20
25	41	80.4	253	4	US-09-036-579-2
26	41	80.4	253	4	US-09-823-494-20
27	41	80.4	253	4	US-09-550-374-2

28	41	80.4	254	1	US-08-242-188-1	Sequence 1, Appl1
29	41	80.4	254	1	US-08-509-261A-1	Sequence 1, Appl1
30	41	80.4	254	1	US-08-660-626-7	Sequence 7, Appl1
31	41	80.4	254	1	US-08-692-892-1	Sequence 1, Appl1
32	41	80.4	254	2	US-08-713-939A-1	Sequence 1, Appl1
33	41	80.4	254	2	US-08-868-162A-21	Sequence 21, Appl1
34	41	80.4	254	4	US-09-031-168-7	Sequence 7, Appl1
35	41	80.4	254	4	US-09-128-450-19	Sequence 19, Appl1
36	41	80.4	254	4	US-09-128-450-28	Sequence 28, Appl1
37	41	80.4	254	4	US-09-036-579-1	Sequence 1, Appl1
38	41	80.4	254	4	US-09-823-494-19	Sequence 19, Appl1
39	41	80.4	254	4	US-09-823-494-28	Sequence 28, Appl1
40	41	80.4	254	4	US-09-550-374-1	Sequence 1, Appl1
41	41	80.4	255	1	US-08-242-188-4	Sequence 4, Appl1
42	41	80.4	255	1	US-08-509-261A-4	Sequence 4, Appl1
43	41	80.4	255	1	US-08-660-626-10	Sequence 10, Appl1
44	41	80.4	255	1	US-08-692-892-4	Sequence 4, Appl1
45	41	80.4	255	2	US-08-713-939A-4	Sequence 4, Appl1

ALIGNMENTS

RESULT 1
US-08-556-823-2
Sequence 2, Application US/08556823
Patent No. 5750361
GENERAL INFORMATION:
APPLICANT: Stanley B. Prusiner
APPLICANT: Kiyotoshi Kaneko
TITLE OF INVENTION: Formation and use of prion protein
TITLE OF INVENTION:
NUMBER OF SEQUENCES: 10
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson
STREET: 2200 Sand Hill Road, Suite 100
CITY: Menlo Park
STATE: California
COUNTRY: USA
ZIP: 94025
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Ascii
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/556,823
FILING DATE:
CLASSIFICATION: 530
ATTORNEY/AGENT INFORMATION:
NAME: Valeta Gregg
REGISTRATION NUMBER: 35,127
REFERENCE/DOCKET NUMBER: 07532/003001
TELECOMMUNICATION INFORMATION:
TELEPHONE: (415) 322-5070
TELEFAX: (415) 854-0875
INFORMATION FOR SEQ ID NO: 2:
SEQUENCE CHARACTERISTICS:
LENGTH: 142 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide
US-08-556-823-2

Query Match 82.4%; Score 42; DB 1; Length 142;
Best Local Similarity 61.5%; Pred. No. 0.014;
Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
QY 1 CXTQYXXESXAXY 13
DB 125 CTTQYKESQAVY 137

```

US-09-128-450-26
: Sequence 26, Application US/09128450
: Patent No. 6211149
:
: GENERAL INFORMATION:
: APPLICANT: Chesebro, Bruce W
: APPLICANT: Caughey, Byron W
: APPLICANT: Chabry, Joelle
: APPLICANT: Priola, Susette
: TITLE OF INVENTION: Inhibitors of Formation of Protease Resistant Prion
: TITLE OF INVENTION: Protein
: FILE REFERENCE: 50121
: CURRENT APPLICATION NUMBER: US/09/128,450
: CURRENT FILING DATE: 1998-08-03
: NUMBER OF SEQ ID NOS: 29
: SOFTWARE: PatentIn Ver. 2.0
: SEQ ID NO 26
: LENGTH: 254
: TYPE: PR1
: ORGANISM: Hamster sp.
US-09-128-450-26

```

Query Match	82.4%	Score 42	DB 4	Length 254
Best Local Similarity	61.5%	Pred. 0.027		
Matches	8	Conservative	0	Mismatches
			5	Indels
			0	Gaps
0Y	1	CXCTGYXXKESAXY	13	
Db	214	CTCTGYKESQAIY	226	

```

RESULT 3
US-09-823-494-26
: Sequence 26, Application US/09823494
: Patent No. 635610
:
: GENERAL INFORMATION:
: APPLICANT: Chesebrough, Bruce W
: APPLICANT: Caughey, Byron W
: APPLICANT: Chabry, Joelle
: APPLICANT: Priola, Susette
: TITLE OF INVENTION: Inhibitors of Formation of
: Protease Resistant Priors
: FILE REFERENCE: 50121
:
: CURRENT APPLICATION NUMBER: US/09/823,494
: CURRENT FILING DATE: 2001-03-30
: PRIOR APPLICATION NUMBER: 09/128,450
: PRIOR FILING DATE: 1998-08-03
: NUMBER OF SEQ ID NOS: 29
: SOFTWARE: PatentIn Ver. 2.0
: SEQ ID NO 26
: LENGTH: 254
:
: TYPE: PRT
:
: ORGANISM: Hamster sp.
:
: US-09-823-494-26

```

Query Match	82.48%	Score 42;	DB 4;	Length 254;
Best Local Similarity	61.58%	Pred. No. 0.027;		
Matches	8;	Conservative	0;	Mismatches
			5;	Indels
			0;	Gaps
QY	1	CTGYXXESKXAY	13	
Db	214	CTGYOKESQAY	226	

RESULT 4
US-08-244-701B-48
Sequence 48, Application US/08244701B
Patent No. 577572
GENERAL INFORMATION:
APPLICANT: Fishleigh, Robert V.
APPLICANT: Robson, Barry
APPLICANT: Mee, Roger P.

TITLE OF INVENTION: Fragments of Prion Proteins
 NUMBER OF SEQUENCES: 67
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Pennie & Edmonds
 STREET: 1155 Avenue of the Americas
 CITY: New York
 STATE: New York
 COUNTRY: U.S.A.
 ZIP: 10036
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.25
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/244,701B
 FILING DATE: 02-JUN-1994
 CLASSIFICATION: 436
 ATTORNEY/AGENT INFORMATION:
 NAME: Fanucci, Allan A.
 REGISTRATION NUMBER: 30,256
 REFERENCE/DOCKET NUMBER: 8080-007
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (212) 790-9090
 TELEFAX: (212) 869-8864/9741
 TELEX: 66141 PENNIE
 INFORMATION FOR SEQ ID NO: 48:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 15 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 MOLECULE TYPE: peptide
 US-08-244-701B-48

```

QY      1 CXTQYXXESAXY 13
        | | | | | | |
Db      1 CTTQYQRESQAY 13

Query Match      80.4%; Score 41; DB 1; Length 15;
Best Local Similarity 61.5%; Pred. No. 0.0022;
Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0.

```

```

1  RESULT 5
2  US-09-076721-48
3  ; Sequence 48, Application US/09076721
4  Patent No. 6379905
5  GENERAL INFORMATION:
6  APPLICANT: FishleIGH, Robert V.
7  APPLICANT: Robson, Barry
8  APPLICANT: Mee, Roger P.
9  TITLE OF INVENTION: Fragments of Prion Proteins
10 NUMBER OF SEQUENCES: 67
11 CORRESPONDENCE ADDRESS:
12 ADDRESSEE: Pennie & Edmonds
13 STREET: 1155 Avenue of the Americas
14 CITY: New York
15 STATE: New York
16 COUNTRY: U.S.A.
17 ZIP: 10036
18 COMPUTER READABLE FORM:
19 MEDIUM TYPE: Floppy disk
20 COMPUTER: IBM PC compatible
21 OPERATING SYSTEM: PC-DOS/MS-DOS
22 SOFTWARE: PatentIn Release #1.0, Version #1.35
23 CURRENT APPLICATION DATA:
24 APPLICATION NUMBER: US/09/076,721
25 FILING DATE:
26 CLASSIFICATION:
27 PRIOR APPLICATION DATA:
28 APPLICATION NUMBER: US 08/244,701
29 FILING DATE:

```

```

: ATTORNEY/AGENT INFORMATION:
: NAME: Fanucci, Allan A.
: REGISTRATION NUMBER: 30,256
: REFERENCE/DOCKET NUMBER: 8080-007
: TELECOMMUNICATION INFORMATION:
: TELEPHONE: (212) 790-0990
: TELEFAX: (212) 869-8864/9741
:
: TELE: 66141 PENNTE
:
: INFORMATION FOR SEQ ID NO: 48:
: SEQUENCE CHARACTERISTICS:
: LENGTH: 15 amino acids
: TYPE: amino acid
: STRANDEDNESS: single
: TOPOLOGY: linear
: MOLECULE TYPE: peptide
:
: OS-09-076-721-48

```

Query Match	80.4%	Score 41:	DB 4:	Length 15:
Best Local	Similarity 61.5%	Pred. No.	0.0022:	
Matches	8;	Conservative	0;	Mismatches 5; Indels 0; Gaps 0;

```
Oy 1 CXTQYXXESXAY 13
    | | | | |
Db 1 CITQYQRESQAY 13
```

RESULT 6
US-09-353-348-3
Sequence 3, Application US/09353348
Patent No. 6261790
GENERAL INFORMATION:
APPLICANT: O'Rourke, Katherine I.
TITLE OF INVENTION: Monoclonal Antibodies and Antibody Cocktail for
TITLE OF INVENTION: Detection of Prion Protein as an Indication of
TITLE OF INVENTION: Transmissible Spongiform Encephalopathies
FILE REFERENCE: O'Rourke
CURRENT APPLICATION NUMBER: US/09/353,348
CURRENT FILING DATE: 1999-07-15
NUMBER OF SEQ ID NOS: 11
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 3
LENGTH: 17
TYPE: PRT
ORGANISM: Ovis aries
US-09-353-348-3

Query Match	80.48	Score 41	DB 4	Length 17
Best Local Similarity	61.58	Pred. No. 0.0025		
Matches 8	Conservative 0	Mismatches 5	Indels 0	Gaps 0

```
QY      1 CXTQYXXESXAXY 13
          | | | | |
Db      1 CTQYQRESQAYY 13
```

1
 2
 3
 4
 5
 6
 7
 8
 9
 10
 11
 12
 13
 14
 15
 16
 17
 18
 19
 20
 21
 22
 23
 24
 25
 26
 27
 28
 29
 30
 31
 32
 33
 34
 35
 36
 37
 38
 39
 40
 41
 42
 43
 44
 45
 46
 47
 48
 49
 50
 51
 52
 53
 54
 55
 56
 57
 58
 59
 60
 61
 62
 63
 64
 65
 66
 67
 68
 69
 70
 71
 72
 73
 74
 75
 76
 77
 78
 79
 80
 81
 82
 83
 84
 85
 86
 87
 88
 89
 90
 91
 92
 93
 94
 95
 96
 97
 98
 99
 100
 101
 102
 103
 104
 105
 106
 107
 108
 109
 110
 111
 112
 113
 114
 115
 116
 117
 118
 119
 120
 121
 122
 123
 124
 125
 126
 127
 128
 129
 130
 131
 132
 133
 134
 135
 136
 137
 138
 139
 140
 141
 142
 143
 144
 145
 146
 147
 148
 149
 150
 151
 152
 153
 154
 155
 156
 157
 158
 159
 160
 161
 162
 163
 164
 165
 166
 167
 168
 169
 170
 171
 172
 173
 174
 175
 176
 177
 178
 179
 180
 181
 182
 183
 184
 185
 186
 187
 188
 189
 190
 191
 192
 193
 194
 195
 196
 197
 198
 199
 200
 201
 202
 203
 204
 205
 206
 207
 208
 209
 210
 211
 212
 213
 214
 215
 216
 217
 218
 219
 220
 221
 222
 223
 224
 225
 226
 227
 228
 229
 230
 231
 232
 233
 234
 235
 236
 237
 238
 239
 240
 241
 242
 243
 244
 245
 246
 247
 248
 249
 250
 251
 252
 253
 254
 255
 256
 257
 258
 259
 260
 261
 262
 263
 264
 265
 266
 267
 268
 269
 270
 271
 272
 273
 274
 275
 276
 277
 278
 279
 280
 281
 282
 283
 284
 285
 286
 287
 288
 289
 290
 291
 292
 293
 294
 295
 296
 297
 298
 299
 300
 301
 302
 303
 304
 305
 306
 307
 308
 309
 310
 311
 312
 313
 314
 315
 316
 317
 318
 319
 320
 321
 322
 323
 324
 325
 326
 327
 328
 329
 330
 331
 332
 333
 334
 335
 336
 337
 338
 339
 340
 341
 342
 343
 344
 345
 346
 347
 348
 349
 350
 351
 352
 353
 354
 355
 356
 357
 358
 359
 360
 361
 362
 363
 364
 365
 366
 367
 368
 369
 370
 371
 372
 373
 374
 375
 376
 377
 378
 379
 380
 381
 382
 383
 384
 385
 386
 387
 388
 389
 390
 391
 392
 393
 394
 395
 396
 397
 398
 399
 400
 401
 402
 403
 404
 405
 406
 407
 408
 409
 410
 411
 412
 413
 414
 415
 416
 417
 418
 419
 420
 421
 422
 423
 424
 425
 426
 427
 428
 429
 430
 431
 432
 433
 434
 435
 436
 437
 438
 439
 440
 441
 442
 443
 444
 445
 446
 447
 448
 449
 450
 451
 452
 453
 454
 455
 456
 457
 458
 459
 460
 461
 462
 463
 464
 465
 466
 467
 468
 469
 470
 471
 472
 473
 474
 475
 476
 477
 478
 479
 480
 481
 482
 483
 484
 485
 486
 487
 488
 489
 490
 491
 492
 493
 494
 495
 496
 497
 498
 499
 500
 501
 502
 503
 504
 505
 506
 507
 508
 509
 510
 511
 512
 513
 514
 515
 516
 517
 518
 519
 520
 521
 522
 523
 524
 525

```

: MEDIUM TYPE: Floppy disk
: COMPUTER: IBM PC compatible
: OPERATING SYSTEM: PC-DOS/MS-DOS
: SOFTWARE: Patentin Release #1.0, Version #1.25
: CURRENT APPLICATION DATA:
: APPLICATION NUMBER: US/08/244,701B
: FILING DATE: 02-JUN-1994
: CLASSIFICATION: 436
: NEW/OLD APPLICATION:

```

ATTORNEY/AGENT INFORMATION:
NAME: Fanucci, Allan A.
REGISTRATION NUMBER: 30,256
REFERENCE/DOCKET NUMBER: 8080-0070
TELECOMMUNICATIONS INFORMATION:
TELEPHONE: (212) 790-0900
TELEFAX: (212) 869-8864/9741
TELEX: 66141 PENNET
INFORMATION FOR SEO ID NO: 33:
SOURCE CHARACTERISTICS:

```

: NAME/KEY: Modified-site
: LOCATION: 1
: OTHER INFORMATION: /label=X
: OTHER INFORMATION: /note="X may be absent or present independently
: OTHER INFORMATION: of Y and denotes one or more amino acid(s)"
: FEATURE:
:

```

OTHER INFORMATION: /note= "Y may be absent or present independently
; of X and denotes one or more amino acid(s)"
; ;
US-08-244-701B-33

Query Match	80.4%	Score 41	DB 1	Length 22
Best Local Similarly	61.5%	Pred. No. 0.0033		
Matches 8	Conservative 0	Mismatches 5	Indels 0	Gaps 0

```
QY      1 CXTQYXXESXAY 13
        | | | | |
Db      3 CITQYQRESQAY 15
```

RESULT 8
 US-08-244-701B-35
 ; Sequence 35, Application US/08244701B
 ; Patent No. 5773572
 ; GENERAL INFORMATION:
 APPLICANT: Fishleigh, Robert V.
 APPLICANT: Robson, Barry
 APPLICANT: Mee, Roger P.
 TITLE OF INVENTION: Fragments of Pilon Proteins
 NUMBER OF SEQUENCES: 67
 CORRESPONDENCE ADDRESS:
 ADDRESS: Pennile & Edmonds
 STREET: 1155 Avenue of the Americas
 CITY: New York
 STATE: New York
 COUNTRY: U.S.A.
 ZIP: 10036
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patentln Release #1.0, Version #1.2
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/244,701B
 FILING DATE: 02-JUN-1994
 CLASSIFICATION: 436
 ATTORNEY/AGENT INFORMATION:

[illegible]

	80.4%;	Score 41;	DB 1;	Length 22;
Query Match	61.5%;	Pred. No. 0.0033;		
Best Local Similarity				
Matches	8;	Conservative	0;	Mismatches
			5;	Indels
			0;	Gaps
QY	1	CXGYXXESAXY	13	
Db	3	CTGYERESQAYI	15	

RESULT 10
 US-09-076-721-33
 Sequence 33, Application US/09076721
 Patent No. 6378905
 GENERAL INFORMATION:
 APPLICANT: Fishleigh, Robert V.
 APPLICANT: Robson, Barry
 APPLICANT: Mee, Roger P.
 TITLE OF INVENTION: Fragments of Prion Proteins
 NUMBER OF SEQUENCES: 67
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: Pennile & Edmonds
 STREET: 1155 Avenue of the Americas
 CITY: New York
 STATE: New York
 COUNTRY: U.S.A.
 ZIP: 10036
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.25
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/09/076,721
 FILING DATE:
 CLASSIFICATION:
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/244,701
 FILING DATE:
 ATTORNEY/AGENT INFORMATION:
 NAME: Panucci, Allan A.
 REGISTRATION NUMBER: 30,256
 REFERENCE/DOCKET NUMBER: 8080-007
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (212) 790-0900
 TELEFAX: (212) 869-8864/9741
 TELEX: 66141 PENNILE
 INFORMATION FOR SEQ ID NO: 33:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 22 amino acids
 TYPE: amino acid
 STRANDEDNESS: single
 TOPOLOGY: linear
 MOLECULE TYPE: peptide
 FEATURE:

Query Match 80.4%; Score 41; DB 4; Length 22;
 Best Local Similarity 61.5%; Pred. No. 0.0033;
 Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTQYXXESXAY 13
 1 1 1 1 1 1 1
 3 CITOYERESQAY 15

RESULT 13

US-08-244-701B-62
 ; Sequence 62, Application US/08244701B
 ; Patent No. 5773572
 ; GENERAL INFORMATION:
 ; APPLICANT: Fishleigh, Robert V.
 ; APPLICANT: Robson, Barry
 ; APPLICANT: Mee, Roger P.
 ; TITLE OF INVENTION: Fragments of Prion Proteins
 ; NUMBER OF SEQUENCES: 67
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Pennie & Edmonds
 ; STREET: 1155 Avenue of the Americas
 ; CITY: New York
 ; STATE: New York
 ; COUNTRY: U.S.A.
 ; ZIP: 10036
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patentin Release #1.0, Version #1.25
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/244,701B
 ; FILING DATE: 02-JUN-1994
 ; CLASSIFICATION: 436
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Panucci, Allan A.
 ; REGISTRATION NUMBER: 30,256
 ; REFERENCE/DOCKET NUMBER: 8080-007
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (212) 790-9090
 ; TELEFAX: (212) 869-8864/9741
 ; TELEX: 66141 PENNIE
 ; INFORMATION FOR SEQ ID NO: 62:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 24 amino acids
 ; TYPE: amino acid
 ; STRANDEDNESS: single
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: peptide
 ; FEATURE:
 ; NAME/KEY: Modified-site
 ; LOCATION: 1
 ; OTHER INFORMATION: /label=X
 ; OTHER INFORMATION: /note=X may be absent or present independently
 ; OTHER INFORMATION: of Y and denotes one or more amino acid(s)"
 ; FEATURE:
 ; NAME/KEY: Modified-site
 ; LOCATION: 4
 ; OTHER INFORMATION: /label=X
 ; OTHER INFORMATION: /note=X - either Ile, Thr or Val"
 ; FEATURE:
 ; NAME/KEY: Modified-site
 ; LOCATION: 8
 ; OTHER INFORMATION: /label=X
 ; OTHER INFORMATION: /note=X - Gln or Glu"
 ; FEATURE:
 ; NAME/KEY: Modified-site
 ; LOCATION: 9
 ; OTHER INFORMATION: /label=X
 ; OTHER INFORMATION: /note=X - Arg or Lys"
 ; FEATURE:

NAME/KEY: Modified-site
 LOCATION: 16
 OTHER INFORMATION: /label=X
 OTHER INFORMATION: /note=X - Asp or Gln"
 ; FEATURE:
 ; NAME/KEY: Modified-site
 ; LOCATION: 17
 ; OTHER INFORMATION: /label=X
 ; OTHER INFORMATION: /note=X - Gly or absent"
 ; FEATURE:
 ; NAME/KEY: Modified-site
 ; LOCATION: 19
 ; OTHER INFORMATION: /label=X
 ; OTHER INFORMATION: /note=X - Gly or Arg"
 ; FEATURE:
 ; NAME/KEY: Modified-site
 ; LOCATION: 20
 ; OTHER INFORMATION: /label=X
 ; OTHER INFORMATION: /note=X - Ala or Ser"
 ; FEATURE:
 ; NAME/KEY: Modified-site
 ; LOCATION: 22
 ; OTHER INFORMATION: /label=X
 ; OTHER INFORMATION: /note=X - Ser or absent"
 ; FEATURE:
 ; NAME/KEY: Modified-site
 ; LOCATION: 23
 ; OTHER INFORMATION: /label=X
 ; OTHER INFORMATION: /note=X - either Ala, Thr, Met or Val"
 ; FEATURE:
 ; NAME/KEY: Modified-site
 ; LOCATION: 24
 ; OTHER INFORMATION: /label=X
 ; OTHER INFORMATION: /note=X may be absent or present independently
 ; OTHER INFORMATION: of X and denotes one or more amino acid(s)"
 ; US-08-244-701B-62

Query Match 80.4%; Score 41; DB 1; Length 24;
 Best Local Similarity 84.6%; Pred. No. 0.0036;
 Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

OY 1 CXTQYXXESXAY 13
 1 1 1 1 1 1 1
 DB 3 CXTQYXXESQAY 15

RESULT 14

US-09-076-721-62
 ; Sequence 62, Application US/09076721
 ; Patent No. 6379905
 ; GENERAL INFORMATION:
 ; APPLICANT: Fishleigh, Robert V.
 ; APPLICANT: Robson, Barry
 ; APPLICANT: Mee, Roger P.
 ; TITLE OF INVENTION: Fragments of Prion Proteins
 ; NUMBER OF SEQUENCES: 67
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Pennie & Edmonds
 ; STREET: 1155 Avenue of the Americas
 ; CITY: New York
 ; STATE: New York
 ; COUNTRY: U.S.A.
 ; ZIP: 10036
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: Patentin Release #1.0, Version #1.25
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/09/076,721
 ; FILING DATE:
 ; CLASSIFICATION:
 ; PRIOR APPLICATION DATA:


```

APPLICATION NUMBER: US 08/244,701
FILING DATE:
ATTORNEY/AGENT INFORMATION:
NAME: Fanucci, Allan A.
REGISTRATION NUMBER: 30,256
REFERENCE/DOCKET NUMBER: 8080-007
TELECOMMUNICATION INFORMATION:
TELEPHONE: (212) 790-9090
TELEFAX: (212) 869-8864/9741
TELEX: 66141 PENNIE
INFORMATION FOR SEQ ID NO: 62:
SEQUENCE CHARACTERISTICS:
LENGTH: 24 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
FEATURE:
NAME/KEY: Modified-site
LOCATION: 1
OTHER INFORMATION: /label=X
OTHER INFORMATION: /note=X may be absent or present independently
OTHER INFORMATION: of Y and denotes one or more amino acid(s)"
FEATURE:
NAME/KEY: Modified-site
LOCATION: 4
OTHER INFORMATION: /label=X
OTHER INFORMATION: /note=X - either Ile, Thr or Val"
FEATURE:
NAME/KEY: Modified-site
LOCATION: 8
OTHER INFORMATION: /label=X
OTHER INFORMATION: /note=X - Arg or Lys"
FEATURE:
NAME/KEY: Modified-site
LOCATION: 9
OTHER INFORMATION: /label=X
OTHER INFORMATION: /note=X - Gly or Arg"
FEATURE:
NAME/KEY: Modified-site
LOCATION: 16
OTHER INFORMATION: /label=X
OTHER INFORMATION: /note=X - Asp or Gln"
FEATURE:
NAME/KEY: Modified-site
LOCATION: 17
OTHER INFORMATION: /label=X
OTHER INFORMATION: /note=X - Gly or absent"
FEATURE:
NAME/KEY: Modified-site
LOCATION: 19
OTHER INFORMATION: /label=X
OTHER INFORMATION: /note=X - Gly or Arg"
FEATURE:
NAME/KEY: Modified-site
LOCATION: 20
OTHER INFORMATION: /label=X
OTHER INFORMATION: /note=X - Ala or Ser"
FEATURE:
NAME/KEY: Modified-site
LOCATION: 22
OTHER INFORMATION: /label=X
OTHER INFORMATION: /note=X - Ser or absent"
FEATURE:
NAME/KEY: Modified-site
LOCATION: 23
OTHER INFORMATION: /label=X
OTHER INFORMATION: /note=X - either Ala, Thr, Met or Val"
FEATURE:
NAME/KEY: Modified-site
LOCATION: 24
OTHER INFORMATION: /label=X
OTHER INFORMATION: /note=Y may be absent or present independently

```

```

OTHER INFORMATION: of X and denotes one or more amino acid(s)"
US-09-076-721-62
Query Match
Best Local Similarity 80.4%; Score 41; DB 4; Length 24;
Matches 11; Conservative 0; Mismatches 2; Indels 0; Gaps 0;
QY 1 CXTQYXXESQAY 13
Db 3 CXTQYXXESQAY 15
RESULT 15
US-09-353-348-7
Sequence 7, Application US/09353348
Patent No. 6261790
GENERAL INFORMATION:
APPLICANT: O'Rourke, Katherine I.
TITLE OF INVENTION: Monoclonal Antibodies and Antibody Cocktail for
TITLE OF INVENTION: Detection of Prion Protein as an Indication of
FILE REFERENCE: O'Rourke
CURRENT APPLICATION NUMBER: US/09/353,348
CURRENT FILING DATE: 1999-07-15
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 7
LENGTH: 26
TYPE: PRT
ORGANISM: Ovis aries
US-09-353-348-7
Query Match
Best Local Similarity 80.4%; Score 41; DB 4; Length 26;
Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
QY 1 CXTQYXXESQAY 13
Db 5 CXTQYXXESQAY 17

```

Search completed: March 24, 2003, 17:23:05
Job time : 12.4583 secs

GenCore version 5.1.4-p5-4578
Copyright (c) 1993 - 2003 CompuGen Ltd.

OM protein - protein search, using sw model

Run on: March 24, 2003, 17:23:11 ; Search time 11.6458 Seconds
(without alignments)
59.679 Million cell updates/sec

Title: US-09-508-828b-3
Perfect score: 51
Sequence: 1 CXTQYXESXAXY 13

Scoring table: BIOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 221153 seqs, 53462247 residues

Total number of hits satisfying chosen parameters: 221153

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Published_Applications_AA.*
1: /cgn2_6/ptodata/1/pubpaa/US08_NEW_PUB.pep.*
2: /cgn2_6/ptodata/1/pubpaa/PCY_NEW_PUB.pep.*
3: /cgn2_6/ptodata/1/pubpaa/US06_NEW_PUB.pep.*
4: /cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep.*
5: /cgn2_6/ptodata/1/pubpaa/US07_NEW_PUB.pep.*
6: /cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep.*
7: /cgn2_6/ptodata/1/pubpaa/PCYUS_PUBCOMB.pep.*
8: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep.*
9: /cgn2_6/ptodata/1/pubpaa/US09_NEW_PUB.pep.*
10: /cgn2_6/ptodata/1/pubpaa/US09_PUBCOMB.pep.*
11: /cgn2_6/ptodata/1/pubpaa/US10_NEW_PUB.pep.*
12: /cgn2_6/ptodata/1/pubpaa/US10_PUBCOMB.pep.*
13: /cgn2_6/ptodata/1/pubpaa/US60_NEW_PUB.pep.*
14: /cgn2_6/ptodata/1/pubpaa/US60_PUBCOMB.pep.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	42	82.4	163	10	US-09-745-003-11 Sequence 11, Appl
2	41	80.4	161	10	US-09-745-003-7 Sequence 7, Appl
3	41	80.4	161	10	US-09-745-003-9 Sequence 9, Appl
4	41	80.4	162	10	US-09-745-003-10 Sequence 10, Appl
5	41	80.4	164	10	US-09-745-003-12 Sequence 12, Appl
6	41	80.4	253	10	US-09-904-987-3 Sequence 3, Appl
7	41	80.4	253	10	US-09-919-172-57 Sequence 57, Appl
8	41	80.4	253	10	US-09-943-906-2 Sequence 2, Appl
9	41	80.4	254	9	US-10-106-574-5 Sequence 5, Appl
10	41	80.4	254	9	US-10-106-574-6 Sequence 6, Appl
11	41	80.4	254	9	US-10-106-574-7 Sequence 7, Appl
12	41	80.4	254	9	US-10-106-574-8 Sequence 8, Appl
13	41	80.4	254	10	US-09-943-906-1 Sequence 1, Appl
14	41	80.4	255	10	US-09-943-906-4 Sequence 4, Appl
15	41	80.4	256	9	US-10-109-551-2 Sequence 2, Appl
16	41	80.4	256	9	US-10-109-551-4 Sequence 4, Appl
17	41	80.4	256	9	US-10-109-551-6 Sequence 6, Appl
18	41	80.4	256	9	US-10-109-551-8 Sequence 8, Appl
19	41	80.4	256	9	US-10-109-551-10 Sequence 10, Appl

20	41	80.4	263	10	US-09-943-906-3	Sequence 3, Appl
21	41	80.4	264	9	US-10-209-194-2	Sequence 2, Appl
22	41	80.4	439	9	US-10-115-984-2	Sequence 2, Appl
23	30	58.8	47	10	US-09-832-312-7	Sequence 7, Appl
24	30	58.8	249	10	US-09-832-312-9	Sequence 9, Appl
25	30	58.8	319	10	US-09-832-312-5	Sequence 5, Appl
26	30	58.8	339	10	US-09-832-312-34	Sequence 34, Appl
27	30	58.8	339	10	US-09-832-312-36	Sequence 36, Appl
28	30	58.8	339	10	US-09-832-312-36	Sequence 36, Appl
29	30	58.8	339	10	US-09-832-312-36	Sequence 36, Appl
30	30	58.8	339	10	US-09-832-312-40	Sequence 40, Appl
31	28	54.9	205	9	US-09-905-291A-23	Sequence 23, Appl
32	28	54.9	205	9	US-10-066-500-99	Sequence 99, Appl
33	28	54.9	205	9	US-09-902-853-23	Sequence 23, Appl
34	28	54.9	205	9	US-09-907-824-23	Sequence 23, Appl
35	28	54.9	205	9	US-09-907-841-23	Sequence 23, Appl
36	28	54.9	205	9	US-09-904-011-23	Sequence 23, Appl
37	28	54.9	205	9	US-10-028-072-274	Sequence 274, App
38	28	54.9	205	9	US-09-906-742-23	Sequence 23, Appl
39	28	54.9	205	9	US-10-121-049-274	Sequence 274, App
40	28	54.9	205	9	US-10-123-904-274	Sequence 274, App
41	28	54.9	205	9	US-10-140-470-274	Sequence 274, App
42	28	54.9	205	9	US-09-906-838-23	Sequence 23, Appl
43	28	54.9	205	9	US-09-907-613-23	Sequence 23, Appl
44	28	54.9	205	9	US-09-907-942-23	Sequence 23, Appl
45	28	54.9	205	9	US-10-175-746-274	Sequence 274, App

ALIGNMENTS

RESULT 1
US-09-745-003-11
Sequence 11, Application US/09745003
Patent No. US20020042122A1
GENERAL INFORMATION:
APPLICANT: Bazar, Fernando J
TITLE OF INVENTION: Human Proteins; Related Reagents
FILE REFERENCE: P1P2
CURRENT APPLICATION NUMBER: US/09/745,003
CURRENT FILING DATE: 2000-12-20
NUMBER OF SEQ ID NOS: 13
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 11
LENGTH: 163
TYPE: PRT
ORGANISM: Hamster sp.
US-09-745-003-11

Query Match 82.4%; Score 42; DB 10; Length 163;
Best Local Similarity 61.5%; Pred. No. 0.014;
Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 1 CXTQYXESXAXY 13
DB 123 CXTQYXESXAXY 135
RESULT 2
US-09-745-003-7
Sequence 7, Application US/09745003
Patent No. US20020042122A1
GENERAL INFORMATION:
APPLICANT: Bazar, Fernando J
TITLE OF INVENTION: Human Proteins; Related Reagents
FILE REFERENCE: P1P2
CURRENT APPLICATION NUMBER: US/09/745,003
CURRENT FILING DATE: 2000-12-20
NUMBER OF SEQ ID NOS: 13
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 7
LENGTH: 161
TYPE: PRT

ORGANISM: sheep
US-09-745-003-7

Query Match
Best Local Similarity 80.4%; Score 41; DB 10; Length 161;
Pred. No. 0.023;

Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 1 CXTQYXXESXAY 13
| | | | | | | | | |
Db 122 CITOYERESQAY 134

RESULT 3

US-09-745-003-9
Sequence 9, Application US/09745003
Patent No. US20020042122A1

GENERAL INFORMATION:

APPLICANT: Bazan, Fernando J

FILE REFERENCE: Prp2

CURRENT APPLICATION NUMBER: US/09/745,003

CURRENT FILING DATE: 2000-12-20

NUMBER OF SEQ ID NOS: 13

SOFTWARE: Patentln Ver. 2.0

SEQ ID NO 9

LENGTH: 161

TYPE: PRT

ORGANISM: bovine

US-09-745-003-9

Query Match

Best Local Similarity 80.4%; Score 41; DB 10; Length 161;
Pred. No. 0.023;

Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 1 CXTQYXXESXAY 13
| | | | | | | | | |
Db 122 CITOYERESQAY 134

RESULT 4

US-09-745-003-10
Sequence 10, Application US/09745003
Patent No. US20020042122A1

GENERAL INFORMATION:

APPLICANT: Bazan, Fernando J

FILE REFERENCE: Prp2

CURRENT APPLICATION NUMBER: US/09/745,003

CURRENT FILING DATE: 2000-12-20

NUMBER OF SEQ ID NOS: 13

SOFTWARE: Patentln Ver. 2.0

SEQ ID NO 10

LENGTH: 162

TYPE: PRT

ORGANISM: primate

US-09-745-003-10

Query Match

Best Local Similarity 80.4%; Score 41; DB 10; Length 162;
Pred. No. 0.023;

-12 10 2 440" data-label="Text">

Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 1 CXTQYXXESXAY 13
| | | | | | | | | |
Db 123 CITOYERESQAY 135

RESULT 5

US-09-745-003-12
Sequence 12, Application US/09745003
Patent No. US20020042122A1

-12 10 2 130" data-label="Text">

GENERAL INFORMATION:

-34 10 10 175" data-label="Text">

APPLICANT: Bazan, Fernando J

-56 10 12 250" data-label="Text">

TITLE OF INVENTION: Human Proteins; Related Reagents

FILE REFERENCE: Prp2
CURRENT APPLICATION NUMBER: US/09/745,003
CURRENT FILING DATE: 2000-12-20
NUMBER OF SEQ ID NOS: 13
SOFTWARE: Patentln Ver. 2.0
SEQ ID NO 12
LENGTH: 164
TYPE: PRT
ORGANISM: rodent
US-09-745-003-12

Query Match
Best Local Similarity 80.4%; Score 41; DB 10; Length 164;
Pred. No. 0.023;

Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 1 CXTQYXXESXAY 13
| | | | | | | | | |
Db 123 CITOYERESQAY 135

RESULT 6

US-09-904-987-3
Sequence 3, Application US/09904987
Patent No. US20020037908A1

GENERAL INFORMATION:

APPLICANT: No. US20020037908A1actyl, Inc.

TITLE OF INVENTION: Methods and Compositions for Controlling Pathological and Prep

FILE REFERENCE: 42108/26146

CURRENT APPLICATION NUMBER: US/09/904,987

CURRENT FILING DATE: 2001-07-12

NUMBER OF SEQ ID NOS: 7

SOFTWARE: Patentln version 3.0

SEQ ID NO 3

LENGTH: 253

TYPE: PRT

ORGANISM: homo sapiens

PUBLICATION INFORMATION:

DATABASE ACCESSION NUMBER: NCBI ENTREZ / XM_009567

DATABASE ENTRY DATE: 2001-04-17

RELEVANT RESIDUES: (1)..(253)

US-09-904-987-3

Query Match

Best Local Similarity 80.4%; Score 41; DB 10; Length 253;
Pred. No. 0.025;

Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY 1 CXTQYXXESXAY 13
| | | | | | | | | |
Db 214 CITOYERESQAY 226

RESULT 7

US-09-919-172-57
Sequence 57, Application US/09919172
Patent No. US20020119463A1

-12 520 2 641" data-label="Text">

GENERAL INFORMATION:

-34 520 10 662" data-label="Text">

APPLICANT: Patis, Mary

-56 520 12 760" data-label="Text">

TITLE OF INVENTION: PROSTATE CANCER MARKERS

-78 520 14 662" data-label="Text">

FILE REFERENCE: PA-0036 US

-100 520 16 760" data-label="Text">

CURRENT APPLICATION NUMBER: US/09/919,172

-122 520 18 760" data-label="Text">

CURRENT FILING DATE: 2001-07-30

-144 520 20 760" data-label="Text">

PRIOR APPLICATION NUMBER: 60/222,469

-166 520 22 760" data-label="Text">

PRIOR FILING DATE: 2000-07-28

-188 520 24 760" data-label="Text">

NUMBER OF SEQ ID NOS: 102

-210 520 26 760" data-label="Text">

SOFTWARE: PERL Program

-232 520 28 760" data-label="Text">

SEQ ID NO 57

-254 520 31 760" data-label="Text">

LENGTH: 253

-276 520 33 760" data-label="Text">

TYPE: PRT

-298 520 35 760" data-label="Text">

ORGANISM: Homo sapiens

-320 520 38 760" data-label="Text">

FEATURE:

-342 520 40 760" data-label="Text">

NAME/KEY: misc_feature

OTHER INFORMATION: Incyte ID NO. US20020119463A1 1256895CD1
US-09-919-172-57

Query Match 80.4%; Score 41; DB 10; Length 253;
Best Local Similarity 61.5%; Pred. No. 0.035;
Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTQYXXESXAXY 13
| | | | |
Db 214 CITOYERESQAYY 226

RESULT 8
US-09-943-906-2
Sequence 2, Application US/09943906
Patent No. US20020150571A1
GENERAL INFORMATION:

APPLICANT: Frusiner, Stanley B.
Williamson, R. Anthony

TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PRP

NUMBER OF SEQUENCES: 86

CORRESPONDENCE ADDRESS:

ADDRESS: Flinn & Richardson P.C.

STREET: 2200 Sand Hill Road

CITY: Menlo Park

STATE: CA

COUNTRY: U.S.A.

ZIP: 94025

COMPUTER READABLE FORM:

MEDIUM TYPE: Diskette

OPERATING SYSTEM: DOS

SOFTWARE: FASTSEQ Version 2.0

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/09/943,906

FILING DATE: 30-Aug-2001

CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 09/550,374

FILING DATE: <Unknown>

ATTORNEY/AGENT INFORMATION:

NAME: Bozicevic, Karl

REGISTRATION NUMBER: 28,807

REFERENCE/DOCKET NUMBER: 06510/059001

TELECOMMUNICATION INFORMATION:

TELEPHONE: 415-854-5277

TELEFAX: 415-854-0875

TELEX: <Unknown>

SEQUENCE FOR SEQ ID NO: 2:

SEQUENCE CHARACTERISTICS:

LENGTH: 253 amino acids

TYPE: amino acid

STRANDEDNESS: single

TOPOLOGY: linear

MOLECULE TYPE: peptide

SEQUENCE DESCRIPTION: SEQ ID NO: 2:

US-09-943-906-2

Query Match 80.4%; Score 41; DB 10; Length 253;
Best Local Similarity 61.5%; Pred. No. 0.035;
Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTQYXXESXAXY 13
| | | | |
Db 214 CITOYERESQAYY 226

RESULT 9
US-10-106-574-5
Sequence 5, Application US/10106574
Patent No. US20020164335A1
GENERAL INFORMATION:

APPLICANT: Harris, David A.
Stewart, Richard S.

TITLE OF INVENTION: Compositions and Methods for the Study and Diagnosis of Prion

FILE REFERENCE: 09789280.0003

CURRENT APPLICATION NUMBER: US/10/106,574

CURRENT FILING DATE: 2002-03-26

NUMBER OF SEQ ID NOS: 8

SOFTWARE: PatentIn version 3.1

SEQ ID NO 7

LENGTH: 254

TYPE: PRP

ORGANISM: Murinae gen. sp.

US-10-106-574-7

Query Match 80.4%; Score 41; DB 9; Length 254;
Best Local Similarity 61.5%; Pred. No. 0.035;
Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTQYXXESXAXY 13
| | | | |
Db 213 CVOYOKESQAYY 225

RESULT 11
US-10-106-574-7
Sequence 7, Application US/10106574
Patent No. US20020164335A1
GENERAL INFORMATION:

APPLICANT: Harris, David A.
Stewart, Richard S.

TITLE OF INVENTION: Compositions and Methods for the Study and Diagnosis of Prion

FILE REFERENCE: 09789280.0003

CURRENT APPLICATION NUMBER: US/10/106,574

CURRENT FILING DATE: 2002-03-26

NUMBER OF SEQ ID NOS: 8

SOFTWARE: PatentIn version 3.1

SEQ ID NO 7

LENGTH: 254

TYPE: PRP

ORGANISM: Murinae gen. sp.

US-10-106-574-7

Query Match 80.4%; Score 41; DB 9; Length 254;
Best Local Similarity 61.5%; Pred. No. 0.035;
Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTQYXXESXAXY 13
| | | | |
Db 213 CVOYOKESQAYY 225

RESULT 10
US-10-106-574-6
Sequence 6, Application US/10106574
Patent No. US20020164335A1
GENERAL INFORMATION:

APPLICANT: Stewart, Richard S.
Harris, David A.

TITLE OF INVENTION: Compositions and Methods for the Study and Diagnosis of Prion

FILE REFERENCE: 09789280.0003

CURRENT APPLICATION NUMBER: US/10/106,574

CURRENT FILING DATE: 2002-03-26

NUMBER OF SEQ ID NOS: 8

SOFTWARE: PatentIn version 3.1

SEQ ID NO 6

LENGTH: 254

TYPE: PRP

ORGANISM: Murinae gen. sp.

US-10-106-574-6

Query Match 80.4%; Score 41; DB 9; Length 254;
Best Local Similarity 61.5%; Pred. No. 0.035;
Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTQYXXESXAXY 13
| | | | |
Db 213 CVOYOKESQAYY 225

OY 1 CXTQYXXESXAY 13
| | | | |
DB 213 CXTQYKRESQAY 225

RESULT 12

US-10-106-574-8
; Sequence 8, Application US/10106574
; Patent No. US20020164335A1
; GENERAL INFORMATION:
; APPLICANT: Harits, David A.
; APPLICANT: Stewart, Richard S.
; TITLE OF INVENTION: Compositions and Methods for the Study and Diagnosis of Prion Dis
; FILE REFERENCE: 09789280.0003
; CURRENT APPLICATION NUMBER: US/10/106,574
; CURRENT FILING DATE: 2002-03-26
; NUMBER OF SEQ ID NOS: 8
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 8
; LENGTH: 254
; TYPE: PRT
; ORGANISM: Murinae gen. sp.
US-10-106-574-8

Query Match 80.4%; Score 41; DB 9; Length 254;
Best Local Similarity 61.5%; Pred. No. 0.035;
Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTQYXXESXAY 13
| | | | |
DB 213 CXTQYKRESQAY 225

RESULT 13

US-09-943-906-1
; Sequence 1, Application US/09943906
; Patent No. US20020150571A1
; GENERAL INFORMATION:
; APPLICANT: Prusiner, Stanley B.
; APPLICANT: Williams, R. Anthony
; APPLICANT: Burton, Dennis R.

TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025

COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/943,906
FILING DATE: 30-Aug-2001
CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/550,374
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX: <Unknown>

INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:

LENGTH: 254 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 1:
US-09-943-906-1

Query Match 80.4%; Score 41; DB 10; Length 254;
Best Local Similarity 61.5%; Pred. No. 0.035;
Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTQYXXESXAY 13
| | | | |
DB 213 CXTQYKRESQAY 225

RESULT 14

US-09-943-906-4
; Sequence 4, Application US/09943906
; Patent No. US20020150571A1
; GENERAL INFORMATION:
; APPLICANT: Prusiner, Stanley B.
; APPLICANT: Williams, R. Anthony
; APPLICANT: Burton, Dennis R.

TITLE OF INVENTION: ANTIBODIES SPECIFIC FOR NATIVE PrP
NUMBER OF SEQUENCES: 86
CORRESPONDENCE ADDRESS:
ADDRESSEE: Fish & Richardson P.C.
STREET: 2200 Sand Hill Road
CITY: Menlo Park
STATE: CA
COUNTRY: U.S.A.
ZIP: 94025

COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FastSeq Version 2.0

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/943,906
FILING DATE: 30-Aug-2001
CLASSIFICATION: <Unknown>

PRIOR APPLICATION DATA:
APPLICATION NUMBER: 09/550,374
FILING DATE: <Unknown>
ATTORNEY/AGENT INFORMATION:
NAME: Bozicevic, Karl
REGISTRATION NUMBER: 28,807
REFERENCE/DOCKET NUMBER: 06510/059001
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-854-5277
TELEFAX: 415-854-0875
TELEX: <Unknown>

INFORMATION FOR SEQ ID NO: 4:
SEQUENCE CHARACTERISTICS:
LENGTH: 255 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
SEQUENCE DESCRIPTION: SEQ ID NO: 4:
US-09-943-906-4

Query Match 80.4%; Score 41; DB 10; Length 255;
Best Local Similarity 61.5%; Pred. No. 0.036;
Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTQYXXESXAY 13
| | | | |
DB 216 CXTQYKRESQAY 228

RESULT 15
US-10-109-551-2
; Sequence 2, Application US/10109551
; Publication No. US20020194635A1
; GENERAL INFORMATION:
; APPLICANT: DUNNE, PATRICK W.
; APPLICANT: PIEDRAHITA, JORGE
; TITLE OF INVENTION: TRANSGENIC ANIMALS RESISTANT TO TRANSMISSIBLE
; FILE REFERENCE: TANK:207US
; CURRENT APPLICATION NUMBER: US/10/109,551
; PRIOR APPLICATION NUMBER: 60/280,549
; PRIOR FILING DATE: 2001-03-30
; NUMBER OF SEQ ID NOS: 10
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO 2
; LENGTH: 256
; TYPE: PRT
; ORGANISM: Bos taurus
US-10-109-551-2

Query Match 80.4%; Score 41; DB 9; Length 256;
Best Local Similarity 61.5%; Pred. No. 0.036;
Matches 8; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

OY 1 CXTQYXESXAY 13
| | | | |
db 217 CTTQYQRESQAY 229

Search completed: March 24, 2003, 17:25:05
Job time : 11.6458 secs

